1:Spier
102, 133, 361

Plateau Yumans NT14
Havasupai

[The map of the settlement has been reproduced for the files in the following manner:

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P. 392 C-3	P. 392 C-4

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

INTRODUCTION

Territory

The territory of the Havasupai in north-central Arizona comprises the broad drainage area of Cataract Canyon and the bottom of that gorge itself. From the viewpoint of the Havasupai village in the canyon bottom, this drainage area is a high plateau. It extends from the east where the benches of Coconino Basin give toward the Little Colorado River, to the Aubrey Cliffs on the west, these marking the descent toward the Colorado River. The northern edge of the area is the rim and the broken ledges of the Grand Canyon: the southern limit is marked by the heights of the San Francisco Peaks and Bill Williams Mountain, beyond which the country falls away to the south. This forms a winter range some ninety miles by seventy-five.

Cataract Canyon cuts across this plateau from Bill Williams Mountain on the south to the Grand Canyon. Near its northern end it is, like the Grand Canyon, a double gorge; first a mile wide canyon through the white limestone some twenty-five hundred feet deep, and then a narrower gorge three to five hundred feet deep, winding through the red sandstone in the bottom. The Havasupai village is located about six miles from the mouth of Cataract Canyon at the widest point in its bed where it is a quarter mile across. The bottom lands between the talus slopes are, however, only five hundred acres in extent. In effect the village is shut in on all sides by towering cliffs which can be scaled in but a few places. Northward, the canyon drops away by a series of nearly impassable falls to join the Grand Canyon. Beyond that lies mile on mile of broken ledge and mountain to the northern rim of the Grand Canyon. Egress to the south is by way of its tortuous ramified arms: Hualapai Canyon to the west, Lee Canyon to the east, and several more, Moqui Trail Canyon among them, further north. In effect, traveling to the north is next to impossible, and to the plateau above is so difficult as to make the isolation quite complete.

Several hundred yards above the village, Cataract Creek bursts from the bed of the canyon, gathers rapidly in volume, and rushes as a narrow erratic stream for two and a half miles to plunge in three great falls to the Colorado. This section is an oasis: irrigated fields and orchards stretch between the talus slopes; the stream is bordered by a dense growth of willows and cottonwoods; mesquite and other bushes cover the slopes. The red sandstone benches above this are arid except for a few springs, as is the bed of the canyon above the village. Here grow

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133 137 mescal, yucca, and a sparse scrub growth. Still higher is the plateau: at the lower elevations this is covered with sagebrush, chamisa, etc.; at a higher level grow juniper, cedar, and pifion trees; and at the Grand Canyon rim and toward the mountains are pines, spruce, and fir. Water is very scarce on the plateau; springs are found chiefly near the mountains, elsewhere the surface run-off of summer rains and melting snows may be caught behind little dams.

[102] [131]

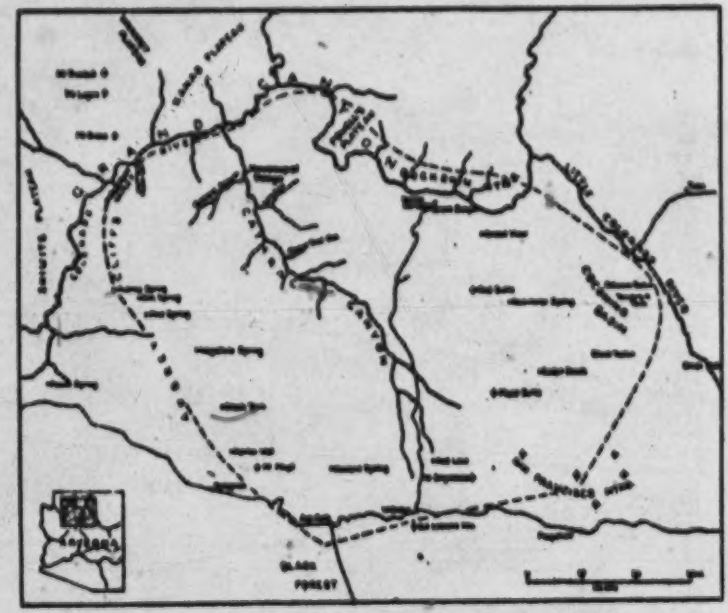

Fig. 1. Territory of the Havasupai.

132 Precipitation is confined to two periods, the heavy summer rains (July to early October) and the winter snowfall (December and January). Its distribution varies from five to fifteen inches per annum over the greater part of the range to a maximum of twenty-five inches near the mountains in the south. The rains are sudden and torrential and the 132 run-off excessive, the accumulated waters rushing into the lower canyon and producing dangerous flood conditions. I witnessed an unheralded 731 cloudburst in August, 1918, when all the heights spurted torrents upon the village below. Everyone fled to the cliffs; the swollen creek swept

[text continues on p. 94]

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Fig. 2. Havasupai Village in Cataract Canyon. The lower canyon level (red bench) shows in the middle ground, the level of the plateau in the distance.

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lay beyond the Grand Canyon, both east of the Uinkaret Mountains and in the Kanab district. The intervening territory is so rugged and the Colorado so difficult to cross that intercourse was at a minimum. The Paiute did cross to the south side, however, in Walapai territory and to the east, where they moved up the Little Colorado. There were no permanent habitations in the vicinity of the Little Colorado (at least as far up as the falls). The Navaho and Hopi settlements are referred to as located at or near Oraibi and the Moenkopie Wash. Navaho and Hopi were encountered in this region, however, and occasionally Paiute, who, for instance, were found on the western side of the river in the vicinity of Coconino Basin about 1855.

There is some question as to how early the Navaho appeared west of the Hopi pueblos. A circumstantial account indicates that the Havasupai met them for the first time about 1864. They were encamped on the plateau above the Coconino Basin, and told of other camps on both sides of the Little Colorado, and from the Grand Canyon rim to the San Francisco peaks. They were not acquainted with each other's language; hence, intercourse was carried on by signs and in the Hopi tongue. The Navaho asserted that they were half of a group living far east of Oraibi and had fled to escape capture by the whites. On the other hand one Navaho insisted that the Havasupai had raided his camp in the Moenkopie district. This incident coincides exactly with the recorded activities of Kit Carson. In 1863 he invaded the Navaho country in New Mexico, capturing some 6000, the greater part of the tribe, and moving them to the Bosque Redondo, where they were released in 1867.[1]

It is also evident that there was a considerable stretch of unoccupied territory along the present line of the Santa Fé Railroad. References to the Yavapai and Apache clearly indicate that their camps were well down on the headwaters of the Verde River and its tributaries. The notion has gained currency, however, that the Havasupai once lived about the San Francisco Mountains and along the adjacent sections of the Little Colorado—in fact, that they were found there by the railroad explorers of the last century. For example, Henshaw observes that

> according to tradition, the Havasupai (or more properly a Pueblo clan or tribe that became incorporated with them) formerly built and occupied villages of a permanent character on the Colorado Chiquito east of the San Francisco mountains, where ruins were pointed out to Powell by a Havasupai chief as the former home of his people. As the result of war with tribes farther east, they abandoned these villages and took

[1] *Handbook of American Indians*, II, 41; Lipps, *The Navajos*, 84 et seq. In 1858 Pattie reached "the chief village of the Nabahoes" four days' travel up the San Juan River, this was "not 50 miles from the Rio del Norte." (Pattie, *Personal Narrative*, 138, 144.)

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51. Shorty lived with his mother, Ca;t. Burro's sister, near her brother's house, 63. Teyadjava, who lived at his father's house, 4>Sakwemidja at her father's house, 6; then he took her to 4. He died and she returned to her mother on her late father's land at 13. Shorty>her at 13; then took her to 51 on her father's land.

53. Mark, who lived on his mother's brother's land at 53>Andjelik at her brother's house, 8. Then took her to 53; she died. Henry, his brother, who lived with their mother at their dead stepfather's house at 52>Nina at her father's house, 60. Then to 53: she died in 1919.

54. Roger, who lived at father's site at 54>Rock Jones' daughter at her father's, 22. Took her to 54; she died. Then he>a Walapai: brought her to 54; she ran away.

55. Tobey, who lived with older brother, Putcilvoiya, at 57>Capt. Jim's daughter at her father's (207); she died. Took Mecca from her father's house, 48, to 55 on his maternal grandmother's brother's land.

56. Little Jim, who lived with his father at 12>his older brother's wife's younger sister who lived with her father at 70. Then brought her near his brother's, 12. She died and he went to live at 61. Then he>Susie, a Walapai, at Pine Spring; then to 56.

57. Putcilvoiya, who lived at father's house, 60>Deskumlauwa's younger sister who lived with her sister's husband at 62. Then to 57 on father's land. His brother Fred who lived with him (at 57?)>Watahomidja's daughter at her father's house, 10. Then he took her to 57; she died. Then he went>Helen at her father's house, 10; he died.

58. Smiley, who lived alone at 31>a woman who lived at 19. Deskumlauwa lived with Smiley's older brother at 2. He died and Smiley took her to 58 on his mother's land. (His father was a Walapai).

Property and Inheritance

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Private ownership of land exists only where the land is cultivated. With the exception of a few patches elsewhere in their territory, such as the Indian Gardens on the Bright Angel trail below Grand Canyon Station, the fields are located in the vicinity of the village in Cataract Canyon. About one hundred acres (one-fifth) of the bottom land there is tillable; depending on the height of the creek permitting irrigation, all of it is farmed. Holdings are not in large continuous strips, but numerous patches scattered through the two or more miles of canyon above the falls. This haphazard distribution is due not only to the

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chances of inheritance, transfer, and sale, but more particularly to the changes wrought by the marauding creek. The stream changes its level and often its position with each big flood, wiping out some fields and leaving others beyond the reach of irrigation, forces their abandonment. The whole group of holdings near Walapai Canyon has been obliterated in this way. Such changes will sometimes bring hitherto uncleared lands and others long abandoned within the possibility of cultivation,

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when they are almost certain to be used without delay by someone desiring additional fields.

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428 A typical instance of male succession is that of Kaδada and his three nephews. Apart from other holdings Kaδada's father owned a large tract (from Camps 55 to 57 and beyond, see map, Fig. 80) which Kaδada and his elder brother inherited. The three sons of the latter fell heir to his share. In the flood of 1911 the creek assumed a new course, dividing this tract neatly in two; whereupon Kaδada took the section west of the creek for his own and gave up using any part of the eastern portion. His nephews kept the eastern tract undivided, even after the death of the middle member of the trio. All three lived together on this tract (Camp 57) until the youngest, Tobey, established his home on land inherited from his maternal grandmother's brother (Camp 55). A small part of the tract south of Camp 55 lay abandoned for years. Kaδada's intention of reclaiming it was well known at the time of my first visit, but considered vague; in 1919, he cleared it.

● [139]

Bob's land was inherited by his widow and her adult son by a former husband. Bob had no male relatives; his older sister, who is well provided for, and another sister's grandson, who often lived with him, received nothing. The heirs have not divided the land.

Nina planted a cornfield independent of her husband. The field belonged to her
423 father's younger brother, Panamida, who let her use it for the support of her two small sons. After her death, Panamida took it back, planting there the next season contrary to custom, but with the approval of the community. Panamida gives some of the corn to Nina's sons.

An uncultivated field, now used only as the dance ground, is claimed by Smiley and Panamida. Smiley, who owned the land, gave it to his daughter for the use of her children; she having married Panamida. She and all her children, save one, are now dead. Panamida claims the field as his, but Smiley says that now the children are dead the field is his again.

425 Land is also exchanged and sold. Sinyella exchanged a strip of corn land near Rock Jones's house with the latter for a piece below Navaho Falls on which he then planted fig trees. When Jess married he bought a piece of uncleared land for a house site and pasture from Manakadja (an acre and a half for thirty-five dollars). In a measure, this is land given for support of a woman relative—although the price is fair enough—since Jess's wife formerly lived with Manakadja, her mother's father and her nearest male relative save one.

423 The products of the land belong to those who own it. Others who
465 assist in caring for the harvest, etc., have no proprietary rights although they are commonly paid in kind. This is distinctly compensation. For instance, on one occasion Sinyella had eight women assisting him in curing the fruit of the many peach trees he owns. Two were members of his family group; the others were not closely related. Each one received part of the crop in payment.

423 Natural products also belong to the land-owner. Trees and brush may not be cut without his consent. Austin owns a cornfield, inherited from his paternal grandfather, west of the old creek bed. In the flood of

1:Spier E-5 (1918) 1928
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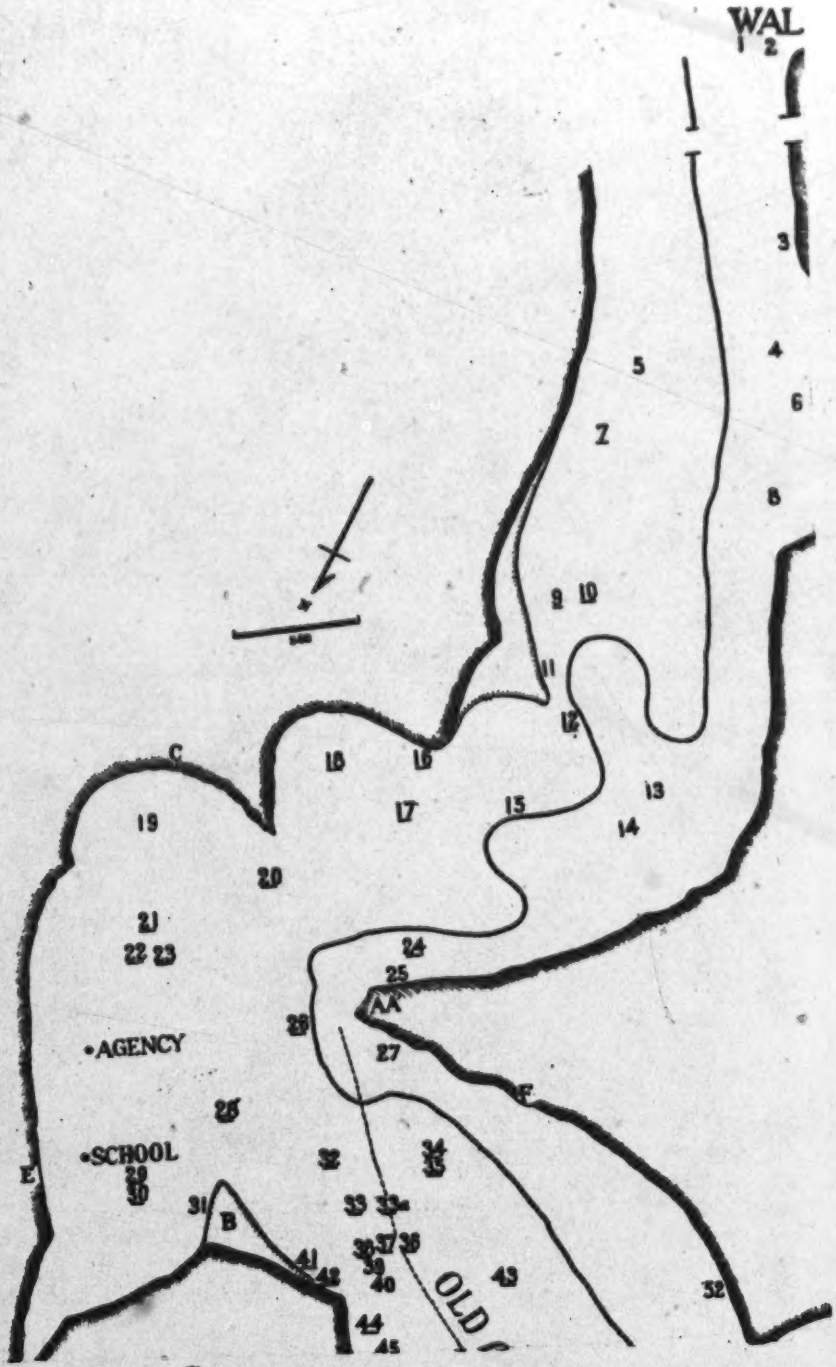

[p. 392 - C]

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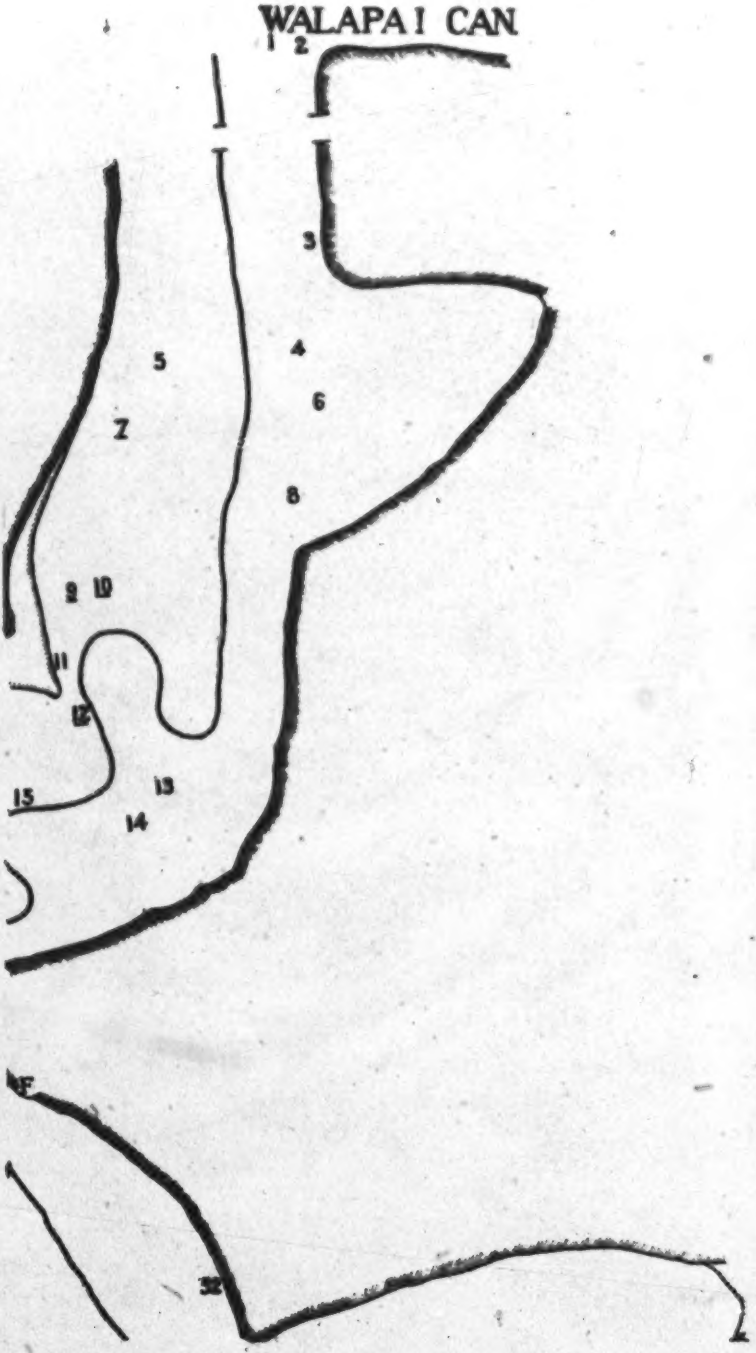

[p. 392 - C-2]

1:Spier E-5 (1918) 1928

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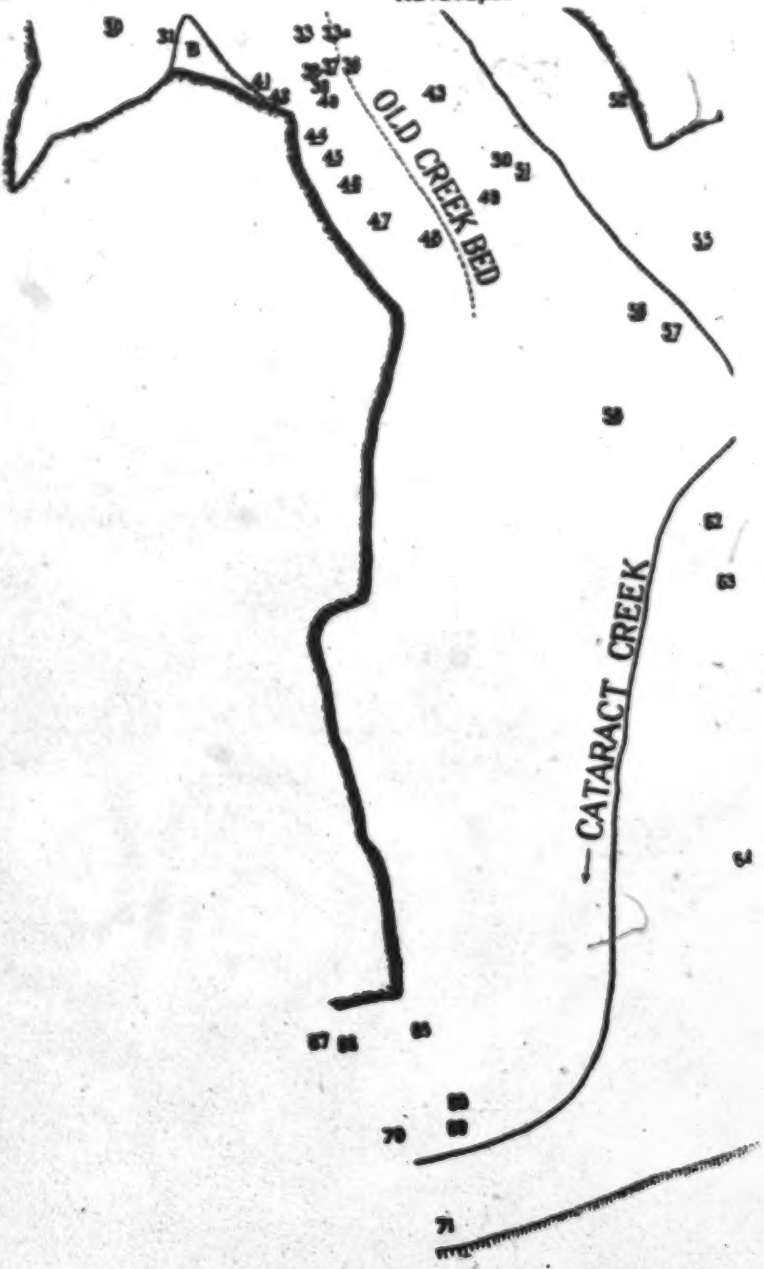

Fig. 10. Map of Camps in the Havasupai Village, Cataract

[p. 292 c-5]

1:Spier E-5 (1918) 1928
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Havasupai

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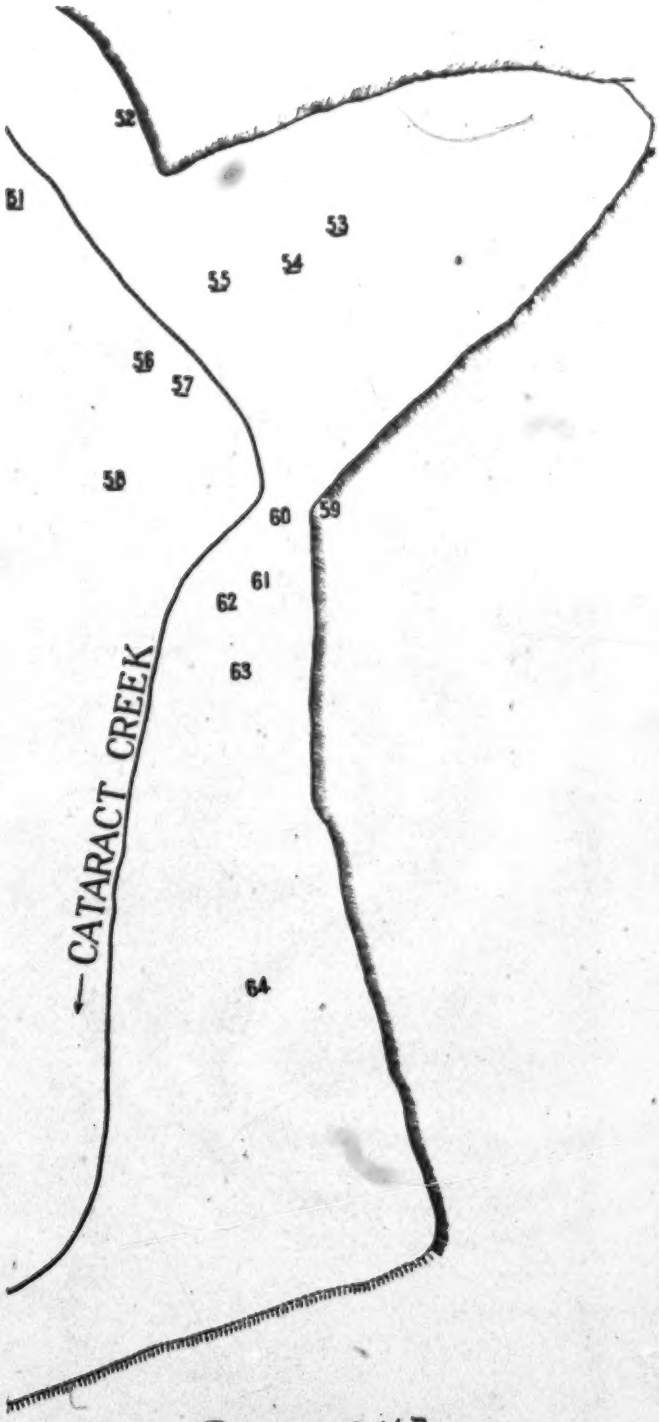

[p. 392 c-4]

the Havasupai Village, Cataract Canyon.

2:Illiff Y-5 (ca.1901) 1954 NT14 Plateau Yumans NT14
Havasupai

These Indians apparently had no knowledge of 273
peyote. There was no intoxicating liquor of any kind on the
reservation. I was beginning to realize that, on the surface, life in 000
this canyon might be like living among children, except when
savage tempers were aroused—and then? Well, I had asked for
adventure.

I still did not know what to write in that annual report.

The school session had been interrupted by the departure of 224
the former superintendent. Vacation, at this school, came in the 222
fall, when the entire tribe made an exodus to the mesa to hunt
game and to gather wild seeds and plants, so I planned to open
school on Monday morning, asking Vesnor to notify the people
in the village. The following Saturday I would be free to take a 161
census of the tribe and determine the acreage under cultivation. So 311
far, I had no basis whatever from which to work out the report
Mr. Ewing wanted. But by verifying the statement of a former
teacher that there were two hundred fifty Indians in the tribe and
three hundred fifty acres in gardens and orchards, I could incor-
porate his figures in my report to Washington.

Even in summer, the sun did not rise in our part of the canyon 132
until after nine o'clock, so it was still gloomy and damp when I
crossed the grounds to the school building Monday morning. The 133
school plant stood at the head of the stream, the dividing line
between the upper, desert end of the canyon and the lower sec-
tion, a jungle of greenness. Immediately behind our schoolhouse
stood a column of stone about three hundred feet high, partly
detached from the wall by rain and frost. If it fell, it would bury
the schoolhouse beneath tons of rock. The danger seemed immi-
nent as I gazed at the upper end of the column, standing straight
and free. Later, I learned that such columns topple over only
after a flood.

I had rung the warning bell, and it was time for school, but no 812
children had appeared. Then the bushes parted violently and 177
dozens of little Indians burst through on the run. Behind them,
maneuvering his well-trained pony with all the skill of a cattleman
rounding up strays, rode Vesnor. The older pupils followed more

2:Hiff Y-5 (ca.1901) 1954 NT14 Plateau Tunnels NT14
Havasupai

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Pacific Stereoptican Co.

A packtrain on the trail from Hilltop into the Havasu Canyon

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Pacific Stereoptican Co.

In these two stone pillars on an outjutting arm of the canyon wall, lived the god-spirit that protected the Havasupai and their gardens from harm

[p. 116 D. Pp. 116 A-C not processed]

Bailiff T-5 (ca. 1961) 1964 NT14 Plateau Tennessee NT14
Havasupai

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Mooney Falls, "Mother of the Waters," showing the wild gorge in which Lanomen's wife was cremated

[p. 116 L]

2-Cliff Y-5 (ca. 1901) 1884 NT14 Plateau Tumacu NT14
Havasupai

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Crude ladder by which the Indians descended to the pool below Mooney Falls, which is out of the picture to the left

[p. 116 M]

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Hovenweep homes of today with fenced plots for gardens at circle. Note the illusionist cliffs of the outer walls in the distance

[p.116P]

2:Iliff Y-S (ca. 1901) 1964 NT14 Plateau Yumans NT14
Havasupai

522 soft. They joked, hilariously mimicking the picture we would make on our return—wilted as a squash vine severed from its root.

231 We jogged on until we came to the mile-long strip the Indians used as a race course. Without an instant's warning, my horse took the bit in his teeth and ran like the wind. At the mile's end, he stopped, heaving and gasping for air. He was, I discovered later, Walapai Bill's best race horse.

133 Our party of three and the two men from the forest reserve followed old Ute along the widening stream, which was so highly charged with minerals that every root, branch or leaf obstructing its flow was coated with solid stone. I gathered some of these leaves from the stream; each tiny vein and serrated edge was plainly marked in the stone coating. The debris along the banks had been transformed into a filigree of great beauty, concealing hollow places and deep caverns that became a danger when one walked too near the edge.

We passed Navaho Falls, so concealed in its jungle of tangled growth that we could not see it, but only heard its roar as it dashed over cliffs and boulders. This was the first large falls, and by some considered the most beautiful, perhaps because of its isolation.

The stream dropped rapidly, but we continued at the same level, traveling on a wide shelf that flanked the chasm. On the rim above Bridal Veil Falls we halted and looked down on the impressive scene two hundred feet below. Here the canyon formed a bowl or amphitheater, centering attention on the falls. The river spread across a high, wide cliff, dropping like a wind-tossed, gossamer veil into a deep blue pool. Thick mysterious folds of mist churned up from the pool, curtaining the gnomelike caves. Weird mineral formations, deposited by the water on shrubs and vines, covered the canyon walls on either side. Shaded by tall trees, the floor of the bowl was a tangle of bright green grass, climbing clematis, mosses, ferns and columbine.

In the past weeks we had visited this amphitheater several times and entered the caves back of the falls, finding giant stalactites and stalagmites and long stone-coated tendrils of maidenhair fern,

2:Illiff Y-5 (ca. 1901) 1964 NT14 Plateau Yumans NT14
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fragile as old lace. Branches of trees, roots and trailing vines, heavily encrusted with mineral, hung over and almost concealed the entrances to the caves. We broke off some of these and found the wood, in some instances, still green and alive underneath.

As we continued down the trail we rode to the rim again and again, unable to resist the wild beauty of our river, roaring with such violence through its narrow gorge.

We passed Crematory Gulch, a western branch of our canyon where the Indians had cremated their dead before accepting the practice of burying in a canyon nearer the school. A former employee once told me that he had visited Crematory Gulch and was surprised to find large Navaho blankets, undamaged by fire, medicine gourds, saddles and, most gruesome of all, the partly burned club of a man's graying hair. He fully realized the danger of desecrating an Indian cemetery, but slipped away with a shaman's gourd rattle. At the time he told me of his venture, he was hoping for an opportunity for a second visit, but whenever he made the attempt, an Indian appeared with disconcerting suddenness, and stood, watching, until he gave up the quest.

We rode to the brink to look down on Mooney Falls where the river roared in a solid column over a ledge higher than Niagara. The noise of its crash into the foaming pool below was deafening; the picture it made, hundreds of feet below us, was like a bit of toyland. Mineral accretions were plastered, like the halves of umbrellas, against the sides of the precipice. I knew that just below our feet were the dangling remains of the frail Indian ladder down which Lanoman and his friends had tenderly lowered his young wife to her funeral pyre. There, too, rested the bones of James Mooney, a sailor turned prospector, who with a few companions had tried to descend below the falls to locate abandoned mines, about which he had heard such fantastic tales. The rope they lowered over the precipice had been too short, and Mooney, the first to make the descent, fell to his death. As a tribute to his memory, white people gave the falls his name, but the Indians continued to use "Mother of the Waters." I thought of those two,

2:111ff Y-5 (ca. 1901) 1964 NT14 Plateau Yumans NT14
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800 resting there in the shadowy gorge, where nature rioted and reared; and yet, in the cool, protected place where they slept, there was an inner quietness and soul-resting peace. Reluctantly we turned our mounts back to the trail, leaving the park officials to make their observations at the falls. We did not suspect it then, but later we had reason to believe that their visit resulted in an invasion of the canyon that filled the Indians with terror.

132 The sun's rays had by now reached us. And the parching waves of heat which the walls reflected filled us with almost unbearable thirst. A large fat dog that we had not been able to prevent following us, crept under bushes or ledges of rock for one precious moment of shade, then ran, panting, to catch up with us. Finally he crawled under a rock and his pitiful moans told us that for him the journey had ended. On our return, we found his body huddled far back under a shelf of stone.

133 Beaver Canyon, a narrow crack in the terrain over which we were traveling, cut across our path. A short bridge would have spanned it, but when we peered into its depths it seemed bottomless; we made the twenty-mile detour around it. We had had no 000 food since our early breakfast, so after rounding the canyon's head at four o'clock, we dismounted and prepared supper. Ute slid over a steep incline into the gorge, and filled two canteens from a spring. Our fried chicken, hard-boiled eggs, green beans, peaches and cocoa disappeared so rapidly that we were appalled when we discovered that Ute, who had agreed to bring his own food, had only a green watermelon (which he declined to cut) and a few peaches. We shared with him, and he was quite pleased with our contribution. We had yet to learn that an Indian carries a minimum of food and travels long stretches without water.

When we had finally completed the long detour around Beaver Canyon, Ute led us to a "rain tank" and the horses had their first drink since we had left home. Then darkness settled down rapidly and it was time to make camp. While we ate a hasty lunch from 609 a shelf of stone, Ute cut his green watermelon and devoured it noisily in addition to the food we gave to him. He held himself

9:1165 Y-6 (ca. 1901) 1964 NT14 Plateau Yumans NT14
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Mr. James and Frances brought up the rear, taking turns in releasing the young pack burro from the catclaw bushes into which she repeatedly rammed her way—packsaddle and all—in order to thrust her head into the cooling shade. Occasionally I interrupted my lesson with old Ute to take my turn at extricating the animal from a thorn bush.

About eleven o'clock that morning, old Ute pointed ahead and shouted excitedly, "Hackataia! Hackataia! (Roaring noise!)"—the Colorado River. In the distance we saw the red north wall of the Grand Canyon. We rode on as far as the horses could travel then tied them to some bushes and climbed a mile to a point where Havasu Canyon joined the Grand Canyon.

I had promised myself that I would not leave the school until I had traced the Blue Water from its source to its mouth. This was the end of the stream. In one of his books, Mr. James had expressed the hope that he might make this trip we had just completed; so he too had realized an ambition.

So far as we were able to learn, no white person had ever before stood on this point—two thousand feet above the rivers and several thousand feet below the upper rim of the canyon. We could neither climb down the precipitous wall to the water nor make our way over the canyoned white limestone to the plateau, but must return by the route we had come.

The Colorado—two thousand feet down—was no more than a brown ribbon, twisting, and threshing its way through a crooked gorge. At this point it made a turn, and into the apex of the curve the Havasu River poured its torrent of blue, sparkling water. Its clear, strong current could be traced for a long distance before it disappeared in the muddy water of the larger river. Havasu Canyon was filled from wall to wall with a dense, green jungle, forming a vivid contrast to the bed of sand and stone through which the Colorado roars.

I took my camera and went to the rim. Below were outjutting rocks from which I could get a picture of the junction of the two rivers. I eased my way down but the heat curled the film, making

2:11iff Y-S (ca. 1931) 1964 NT14 Plateau Tumsas NT14
Havasupai

173 Desert weary, they tarried by the stream, reluctant to leave a spot that had everything they so much desired, but their gods had not yet spoken. Discouraged, they began the long climb up to the plateau and westward. A child cried. The procession halted and the child's voice was stilled. Each effort to resume the journey brought that cry of protest. The wise men quickly issued their edict: "The gods speak to us through the voice of the child; this is the home to which they have led us."

Joyously the people unpacked their loads and began building houses and making gardens.

173 Handed down through many generations, this old tale expresses
77b the Indians' desire to lay in the laps of the gods every problem that affects their lives. On the canyon rim overlooking a wide section of the floor, they found the god-spirit in two gigantic pillars of stone. So they built their houses on either side of the stream of blue water where the gods could watch over them night and day.

133 The Indians' accounts of the god-spirit residing in the two stones
● turned our attention to the walls of the gorge. Miss Goenawein, the only old-timer employed at the school, had visited every point of interest within walking distance, so she acted as guide.

From the Indians she had learned of the Black Man. After Sunday school she took Frances and me to a side canyon where we gazed up at the shiny, black form of a giant stone man, lying prone as if he had dropped down and fallen asleep. We stood in the hot sun, trying to discover what force had caught and held the black mineral while the red sandstone built its layers around it. Doubtless the old men had a tale about this phenomenon, had we asked them. But in the discomfort of the intense heat and the sunlight striking our faces as we gazed upward, our interest in the Black Man quickly vanished. So we wandered over to examine some pictographs on a boulder, beautiful primitive art that could hold one entranced indefinitely.

212 The boulder stood in the center of the canyon; the base, worn away on one side, left a projecting ledge some four feet above the ground. Stooping low, we crawled under the ledge, straining for

2:11iff Y-5 (ca.1961) 1954 NT14 Plateau Yumans NT14
Havasupai

487 - we had heard rumours of a secret crack in the canyon wall through
133 which the Indians fled to the outside when pressed by enemy invaders. Immediately we planned to investigate. When Vernor learned that we intended to go through the passage, he shook his head gravely and cautioned, "Indian moccasin walk trail all right. Think white man shoe no good." Before we were through with the experience we agreed with him.

After a walk of several miles, we stood in a side gorge and gazed up at a long triangular crevice that split the wall to an incredible height. A ledge of stone, fifty feet above the canyon floor, seemed to form the base from which the crack rose to an apex. We realized that this might prove a little more dangerous than some of our other ventures—but if the Indians went through, so could we. It would be worth the climb to stand under the open sky free from sharp, enclosing walls.

[41] Two Indian ladders (logs on which crosspieces of heavy sticks were tied with leather thongs) took us up to the stone ledge. The loose rungs, giving under our feet, swayed the logs threatening to spill us. Shaky from our tussle with the ladders, we pulled ourselves up, single file, onto the stone ledge and faced the entrance to the crevice through which ran the old Indian trail. And behold! this was not the base of the crack at all, but its center—the fissure continued downward so deep into the earth that we could not see the point where its sides met. The trail, a mere edge of stone clinging to one of the close-set walls, ran through the narrow crevice midway between the top and the distant bottom.

Mr. Burnett took one look at the precarious trail, then scrambled down the ladders as fast as he dared to solid ground, where his dog anxiously awaited him. How deserted we felt when he left us to face the dark passage alone! I began to realize that we might encounter unsurmountable difficulties in that thin crack before it landed us somewhere "up above." We stood peering into its darkness, wondering what force had cut this vertical chasm through solid stone. Had a river come in from the plateau, carving its way through the sandstone wall, then disappeared? Or had an earth tremor split the stone apart? A few yards ahead the jagged walls

2:Illiff Y-5 (ca.1901) 1954 NT14 Plateau Yumans NT14
Havasupai

seemed to reach across and touch, but the entrance was fairly wide. Rather than turn back, we started the climb.

The trail grew narrower as we advanced toward the earth's interior, the light from the entrance dimmer, the walls damper. Then, in the darkness, we came to that tricky section that is dreaded by those who use the trail. The ledge we followed disappeared. There were only rounded knobs on the wall for footholds, slippery with the slime and water that oozed over them. Oh, what a fall we might take! We did as the Indians must have done, leaned across the narrow chasm, pressing our hands against the opposite wall to brace ourselves, and cautiously stepped from knob to knob. We tried to keep our nerves steady by refusing to look down at the close-set, ragged walls which fell away to such terrifying depths. I wanted to get down and crawl, but the knobs were too small, spaced too far apart.

Vesnor had warned us, so we had put on shoes suitable for climbing, but I kept thinking of the moccasined feet that had worn this path, and the surer ease with which they walked. I knew that one misstep would plunge me to those sharp points far below, or farther down to the bottom of the slimy crevice.

After what seemed endless hours, a dim light appeared ahead. It grew brighter as we worked our way toward it. Presently we emerged in a deep, bowl-shaped depression, but a stone roof above the bowl shut out the sunlight.

Miss Goenawein used the Indians' footholds, while Frances and I boosted her up to the surface. Then she pulled and Frances boosted me out of the hole; together, we pulled Frances up. We were bent double under a boulder that would have completely covered the bowl from which we had just climbed, had not this section of its base been broken away. Crawling out into brilliant sunshine reflected from miles and miles of sparkling sand and red bluffs, we were careful not to stray far from this boulder that hid the mouth of the crevice, for there were thousands of others like it strewn over the barren land. We lacked the Indians' instinct to mark a spot so surely that it could never be lost.

2:Iliff Y-6 (ca. 1901) 1954 NT14 Plateau Yumans NT14
Havasupai

Over at the rim, we looked down into the canyon we had so recently left, trying to locate the farmer and his dog, but they were not within sight. We stood about, discussing the Indians' frantic escapes through the crevice, and the fact that now it was a short cut for men who had a few ponies grazing on this level. Then one of the girls, just to hear the racket it would make, pushed a small boulder over the edge. Others followed. As they clattered over the wall, striking projections and bouncing far out into the canyon, the farmer came into view, running for his life, his dog leaping at his heels. We were as frightened as he, for we still could hear the falling stones crashing their way down, and knew that if one struck him, the blow would be fatal. We returned, as fast as the slippery crevice would permit and descended the wobbly ladders to the canyon floor.

The farmer confronted us with blazing eyes. "Those stones you rolled down would have killed me and my dog if we hadn't run with all our might," he exploded.

We tried to explain and apologized, but realized we could never again persuade him to accompany us on an exploring trip.

At our cottage, old Gentle Annie in her accustomed place at the foot of the cottonwood, waited for me. She wore a strawberry-red dress, my dress. She had wanted clothes, but could no longer see well enough to make them. So each time I came within reach, she grabbed my skirt and begged, "Dress, you give 'em." I was obligated, in a way: hadn't she shared her mescal slab with me? So I had given her the brightest dress I owned. She had been effusive in her appreciation, put it on over her other dress and walked proudly home. As I watched her, aged and tired, making her slow way down the path, I thought of the young wife she had been, standing by her man's side, fiercely defending their possessions, their home and her own body from the grasping hands of the enemy. One of these battles was particularly vivid in her memory.

In their younger days, Annie and her man had lived for a time in a cave high up on the canyon wall. In the dark hours of a summer morning, they were awakened by the soft scuff of moccasined feet.

2:Illiff Y-5 (ca.1901) 1954 NT14 Plateau Yumans NT14
Havasupai

Dimly they saw the hurrying forms of the enemy slipping stealthily past the mouth of their cave toward the village. Escaping through a rear opening, the young couple were working their way down the wall, leaping crevices, scrambling down cliffs, hurrying to warn their tribesmen, when, with a triumphant yell, the invaders gave chase. Gentle Annie and her man outran their pursuers and reached the village already alarmed by the commotion and frantically arming for defense.

At nightfall, when the thieving marauders retreated laden with booty, fighting their way up the trail, many dead, both enemy and tribesmen, lay on the canyon floor. Houses had been emptied of their dried corn, pumpkin and venison. Warm blankets were gone. Corrals held no ponies. Children had been orphaned. Bitterness was in the hearts of the Havasupai at the loss of their tribesmen, and the prospect of the almost impossible task of again providing against the cold winter.

In trying to describe the bitter fight, in the few English words at her command, Gentle Annie's knotted hands clenched and her dark eyes flashed with the violence of her emotions in living again the cruelty and hardship. "We work, we make—they take," was the simple statement that ended her story. The strawberry-red dress was a small gift but it had brought momentary happiness to an old woman in whom the fire of youth had not completely died.

On this visit, Gentle Annie was not thinking of wars; she had business to transact. She carried a little basket containing five fresh figs; offering them to me, she said, "Pigs, pive cent." I bought her figs, split them open and laid them on my window sill to dry. Within a few days they would be rich and sweet.

One day Miss Goenawein mentioned some small rooms or caves excavated in the sandstone wall beneath the gods, that held secrets of the tribe's exciting Days of the Long Ago. My old urge to explore flared. I wanted to learn what possible use the caves had been to these canyon dwellers. Were they granaries such as honeycombed the walls on either side of the village? Were their interiors brightened with pictographs recounting the tribe's turbulent past?

133 Were they carved there by Those of Old? A short trip might give the answer.

We scrambled up the talus on one of the steepest trails I had ever climbed, followed a ledge until we came to many openings in the face of the wall, each a tiny doorway. Stooping, we passed through one of the doorways, but could not stand erect under the low ceiling. The sandstone walls were bare. The floor beneath our feet gave a hollow sound for the caves were in tiers; a row of such cavities was immediately below the ones on this level. The ledge formed a path on which the occupants could pass from one cave to another.

We returned to the ledge and looked down on the peaceful scene so far below: the village, bathed in dazzling sunlight . . . men drying buckskin . . . women weaving baskets or gambling fiercely under their porch shelters . . . a wide pool, dark with the bodies of frolicking children. What need had these people for dome-shaped holes in their canyon wall, holes that bore no evidence of recent use? Yet across the canyon on a flat-topped bluff stood a [712] fort; through the portholes in its masonry, the canyon could be defended from wall to wall—with help from these ledges.

726 714 With the battlefield a panorama below us it was easy to visualize the battles that had been fought on the canyon floor, Gentle Annie and others of her generation unwilling participants. In preparation, the Havasupai armor-bearers hastily scrambled into their armor—buckskin robes falling from their necks almost to the feet protecting the body front and rear, a wad of buckskin in the left hand to protect the face, a roll of it about the neck, the right hand free to wield hatchet or club. The shield-bearers, carrying strong wooden sticks from which buckskin aprons depended, accompanied the armor-bearers in the forefront of the battle or, in retreat, covered the rear. The shield-bearers were of particular importance, for the enemies' arrows clung to their buckskin shields or fell harmlessly from them. Armed men, crouched in the protection of these shields, sent their salvos against the enemy at every opportunity, while the armor-bearers clubbed and beat the invaders.

2:11iff Y-5 (ca. 1901) 1954 NT14 Plateau Yumans NT14
Havasupai

to finish before dark. She was nervous about the weather, but wanted the new dress to wear to Sunday school, so went on with her work.

A hot wind blew through the canyon, bending the trees and swirling the sand about in clouds. Then came a breathless stillness. Vera threw her work aside, and ran out of doors. We followed. With a quick glance at the sky, the girl exclaimed, "Very bad storm up there, very bad!" Vera knew the canyon in all of its moods. She was terrified. So were we. Something sinister was brewing and our strip of sky did not tell us what to expect. If only we could see beyond the rim of that high canyon wall! Suddenly masses of black, heavy clouds boiled into view, rolling and tumbling ominously, the lower folds surging violently upward, those above shooting down in writhing, twisting masses. Through the blackness we caught occasional glimpses of a high greenish ceiling. What would the storm bring? If only wind, the walls would protect us; a hurricane could not negotiate so narrow a gorge; but if the clouds were loaded with water, we were in grave danger.

The topography of the surrounding country was against us; the plateau spread, like an open fan, to the south, the east and the west, forming a drainage area of hundreds of square miles which poured its water into our canyon. We didn't realize then that the indentations in the rimrock were old watercourses, which this drainage had cut through the outer limestone walls on its way to our chasm.

The stage was set for quick action. The clouds rolled and boiled, but in the canyon there was only stillness, pressing down. The big cottonwood leaves hung limp; the dead air warned of disaster. Then again came that inrush of hot air. The tension eased a little when big, misshapen drops hit the ground with vicious spats. The rain had come, but it was an unnatural rain that filled us with awe.

We retreated to the house and stood in the doorway watching the torrential downpour. Suddenly Vera burst into tears.

"Look! Look!" she cried, pointing to the high canyon wall back of the school building.

2:1liff Y-5 (ca.1901) 1954 NT14 Plateau Yumans NT14
Havasupai

132 with laughter, released at once from the numbness of strain and fatigue.

We walked back to the buildings, admitting, with chagrin, that we would have been safer and drier had we never left them.

I took my camera and went out to get pictures of the rivers that still cascaded over the rim in five or six places between the school and the village. They were rapidly diminishing in size, but some of them drained in until late the following day.

731 The Indians' gardens and orchards that had been in the path of the main current were washed out and swept over the falls. The houses that stood on low ground were destroyed; however, the sagacity the Indians had acquired through long and bitter experience with floods enabled them to escape without the loss of a life, and with only minor losses of clothing. Each family had a crevice in the canyon walls that made a safe shelter. Here they set up temporary housekeeping.

I expected the children to appear for school Monday morning half-clothed, but only one pair of pants was missing. Six-year-old Dan, face clean, hair brushed and dripping wet, wore his uniform blouse, shoes and stockings, but no pants. He was a comical sight, but no one laughed.

133 731 The Indians warned us that nature would deal us another blow before we could settle down with our usual feeling of security—which wasn't very secure, after all. Many columns of stone stood out from the parent wall, separated from it by fissures in which water from rain or melting snow collected. Freezing weather turned the water into ice, increasing the pressure which widened the crack. This freezing and thawing, over a period of years, left the column unattached. A flood brought such sections tumbling down. This new danger was almost as exciting as the flood had been. It was always a gamble with us, not with the Indians, as to which section would topple over. The one directly back of the school building leaned out threateningly, but when I asked Bob for his opinion, he shook his head.

"Him no fall yet," he assured me, and since Vesnor agreed, we

2:Iliff Y-5 (ca.1901) 1954 NT14 Plateau Yumans NT14
Havasupai

continued our school sessions. The men pointed out another pillar, farther down the canyon, that endangered neither school nor village, that would come down "four suns, maybe five."

From the day of the flood, falling boulders and landslides had kept us in an unsettled state, but on the fourth day, as the men had predicted, the big column fell. It leaned out from the wall, toppled crazily, its center buckling, and burst apart with a roar as if the gorge itself had split open and was shaking itself to pieces. A bedlam of sound struck the angled walls to be tossed back, echoing and re-echoing until it seemed there would never be an end to it. We hurried down to view the ruin, arriving before the dust had settled, while the stones were still sliding over one another, groaning and grinding as they shifted to a lower level.

The Indians patiently repaired their houses, dried out the furnishings, rebuilt fences, replanted gardens and orchards. How many times in the past had they undertaken this same task, I wondered. I wondered, too, at the leisurely way they worked, stopping to gamble a little, to visit and make merry for awhile, or to eat food some neighbor brought. If a task could not be done one way, try another; if it could not be done today, try it tomorrow. They had never worked by a clock, nor permitted time to become their master, so they, as a people, remained cheerful, unhurried.

Portions of the Walapai trail had been wiped out. The Indian men, using their native methods with brush and stones, soon had it passable but dangerous, so we were greatly surprised when several men rode down from the plateau and stopped at the school. One of them, Mr. Jacobs, an engineer in charge of a surveying party on the government reserve, expressed his surprise in finding us alive and the buildings standing. He said, "We watched the storm from our camp a few miles back on the mesa. From there, it looked as if a cloudburst hit right in this canyon. We expected to find this place swept clean as a whistle."

According to his report and that of his men, our danger was as real as it had seemed. But now that it was over, I was prepared.

3:James T-5 (ca.1900) 1903
NT14 Plateau Yumans NT14
Havasupai

CHAPTER XIII

THE PEOPLE OF THE BLUE WATER AND THEIR HOME

OF no people of the Southwest, perhaps, has so much utter nonsense been written as of this interesting People of the Blue Water, the *pai* (people) of the *wuzu* (blue) *hahe* (water) — the Havasupais. As far as we know, Padre Garcés was the first white man to visit them in their Cataract Canyon home, and he speaks of his visit in his interesting Diary translated and annotated by the lamented Elliott Coues shortly before his death.

Captain Sitgreaves, Lieutenant Ives, Captain Palfrey, Major J. W. Powell, Lieut. F. H. Cushing, and others in turn visited them, but very little was either known or written about them when, over a dozen years ago, I was conducted to their marvellously picturesque home by Mr. W. W. Bass, the well-known guide of the Grand Canyon.

The journey on that occasion was a remarkable one for me, as, though I was fairly well versed in the trails of the Grand Canyon (having then descended four of them), I had never seen such a trail as was the Topocobya Trail down which we descended late in the evening. Leaving our wagon, after sixteen miles' drive through the Kohonino Forest from Bass Camp, we packed food, blankets, and cameras on horses and burros, and, after two miles of travel in what in Western parlance is called

[pp. 1-198 not processed]

a "draw," the real head of the trail was reached. We walked in the closing dusk of day to the edge of the precipice and looked off to where our guide told us we must shortly be travelling. Far below, almost a thousand feet, without the sign of a trail, it seemed as if he must be hoaxing us. Soon, however, as we followed him, we found ourselves on a rocky shelf, and then began the most stupendous series of zigzags I had ever been on. Back and forth we wended, our trail a mere scratch on the rocky slope, here descending rugged steps, where a misstep meant sure and awful death. Higher and higher the walls rose around us; darker and darker grew the night; more weird and awesome the wind and weather carved figures sculptured on the sides and summits of the walls, and still down we went. At last we reached a vast cavernous-like place where Topocobya Spring is located. A small flow of water comes from the solid rock, and there we watered our horses and filled up our canteens prior to advancing on our seemingly never-ending descent. At last we reached the level, and there, lighting a fire, made camp and rested before penetrating farther into the deep and mystic recesses of the Havasupais. Early in the morning we began the farther descent. Mile after mile we traversed, first riding on the dry bed of the winter stream, then entering the narrower walls formed by the erosion of centuries through first one stratum of rock, then another. Now we were riding on a narrow shelf, on one side of which was a high wall, and on the other a deep, narrow ravine, in the bottom of which the erosive forces have cut a number of holes,—small troughs or bath tubs in the sandstone, where during the rainy season pools of delicious water may be found. In a short time

3:James T-5 (ca.1900) 1903
NT14 Plateau Yumans NT14
Havasupai

we were riding up or down literal stairways cut in the rock, or rounding "Cape Horns," where we held our breath at the dreadful consequences that would ensue were horse or man to slip. Entering Rattlesnake Canyon our whole course was on a shelving slope of rock, over which even experienced horses tread gingerly. At last we came to the bed of the main canyon, and then for five or six miles we journeyed on, in the sand or the gravelly wash, for the stream that flows through this narrow canyon in storm times has no other law than its own wilful force. To-day we ride in one place, to-morrow's storm changes everything. After numberless twinings and twistings, all of which, however, gave a persistent northwesterly direction to our travelling, we came in sight of a score or so of large and fine cotton-wood trees, whose height far surpassed the smaller mes-quite, cottonwood, and other trees that line much of the canyon's bed. These large trees told us our journey was practically at an end, for here begins the outpour-ing of the numberless springs that make the stream we can already hear rushing in its pebbly bed lower down. Without any premonition they spring out in large and small volume at the foot of some of these trees, and the Havasu — the Blue Water — is made. Every few yards adds to the water's volume, for more springs empty their flow into it. The first and only real buildings are the schoolhouse and the homes of the farmer and teachers, and then, at once, begin the small farms of the Havasupais.

Stand on the slope here, where a mass of talus rises from the trail side, so that we can survey the whole of the picturesque scene. Note its setting! Towering walls of regularly laminated red sandstone, though the

3:James T-5 (ca. 1900) 1903
NT14 Plateau Yumans NT14
Havasupai

133 36 layers are of differing thicknesses, wind in and out, as if following the meandering course of the stream, and over this the perfect blue of the Arizona sky. These make the most marvellously picturesque dwelling-place of America. Even Acoma's mesa heights and Walpi's precipice-surrounded walls are not more picturesque, and when you add the charm of the verdure nourished by the sweet waters of the Havasu, the picture is complete in its unique attractiveness.

Not even in the Green Emerald Isle, or the county of Devonshire, or the vineyards of France, is richer verdure to be found than fills up the open space between these great walls. Willows reveal the winding path of the Havasu, and everywhere else are the fields of the Indians. Patches of corn, watermelons, squash, canteloupes, beans, sunflowers, chili, onions, and alfalfa, with here and there peach, mesquite, and cottonwood trees, abound. As a rule these patches are protected and set off one from another by hedges of wattled willows or fences of rudely placed cottonwood poles. Through the fields trails meander in every direction, and they are also "cut up" by irrigating ditches. Some of the better irrigated fields are divided into small sections — like the squares of a checker-board — in order that the water may be more systematically distributed.

133 241 311 [487] [312]

342 The peaceful *kawas* of the Havasupais nestle here and there among these verdant growths. Themselves covered with willows, it is often hard to distinguish them from the trees, were it not that at our approach small groups of men, women, and children, some clad in flaming red, others in all the colors of the rainbow, and some in even less than Mark Twain's descriptive smile, stand forth and reveal the dwelling-places. Now and again [291]

3:James T-5 (ca. 1900) 1903
NT14 Plateau Yumans NT14
Havasupai

342 summer time and thus keep the canyon intensely hot both night and day. The large flow of water and
[137 the dense growth of willows and other verdure keep
132] the soil constantly moist, so there is a humidity in the atmosphere which, in hot weather, makes it very oppressive.

132 This moisture renders the canyon cold in winter, although the thermometer never ranges very low. Snow falls but seldom, and then disappears almost as soon as it lights. In 1898 there was snow that stayed on the ground for several hours, but this was one of the severest winters they have had for many years.

133 A hundred yards or so below where the springs commence to flow Wallapai Canyon enters from the left. It is similar in appearance to, though narrower than, Havasu (Cataract) Canyon, the walls being of red sandstone, the strata of which are as regular as if laid by masons. A few hundred yards beyond the junction of
491 the two canyons a remarkable piece of Indian engineer-
499 ing is in evidence, showing how the Indians ascend
133 from a lower to an upper platform. There is a drop here in the stratum of some twenty-five or thirty feet, and to overcome this obstacle the Havasupais built a cage with logs which they filled with stones, and then from this stretched rude logs up and across, to which other logs were fastened, thus making a fairly substantial bridge from the lower to the upper stratum over which their horses as well as themselves could safely pass. The trail from this point ascends through tortuous canyons a distance of seven miles to the territory occupied by the Wallapais.

133 Just below the entrance to Wallapai Canyon a vast mass of talus has fallen, and two hundred yards farther

3.James T-5 (ca.1900) 1903
NT14 Plateau Yumans NT14
Havasupai

down, the Cataract Canyon trail goes over a portion of this talus to avoid the creek, which has here crossed from the other side of the canyon and has become a rapidly flowing stream some two feet or more in depth. Attached to this talus is a large mass of solid concrete made of pebbles, rocks, and sand that have been washed down in the creek and made cohesive by the lime from the water. Here the canyon narrows again and the stupendous walls seem very near to the willow-fringed stream and the small fields. A few hundred feet farther it opens out again, and as one rides on the trail he gets exquisite views of the gray stone walls superposed on the red sandstones to the northwest. These gray and creamy sandstones, with their numerous and delicate tints and shades, afford most delightful contrasts to the glaring and monotonous red of the walls beneath. From this point we gain our first view of the so-called Havasupai stone gods, named by them "Hue-gli-i-wa," the story of which is told elsewhere.

These rocky pillars with their supporting walls seem as if they were once a part of a great wall that entirely spanned the canyon, the towers being sentinel outlooks to guard from attack both above and below. The portion of the wall to the right, as one descends the canyon, has been washed away, but the tower-crowned mass to the left still preserves a broad sweep into the very heart of the canyon as if it would bar all further progress. Following the sweep of this curve and passing the wall immediately underneath the outermost of the two towers, we view from the trail which ascends a mass of talus at this point another widened-out part of the canyon, which seems entirely covered with willows, here and there overshadowed by a few straggling cottonwoods.

3:James T-5 (ca. 1900) 1903
NT14 Flatema Tumans NT14
Havasupai

133 This is where the ceremonial dances of the Havasupais
778 take place.
776 On the summit of the wall on the other side of the canyon from the Hue-gil-i-wa are two stone objects, one named Hue-a-pa-a, and the one farther down the canyon, Hue-pu-keh-i. These are great objects of reverence, for they represent the ancestors of the Havasupai race. Hue-a-pa-a — the man — has a child upon his back and two more by his side, and he is calling to his wife — Hue-pu-keh-i — to hurry along, as the baby is hungry and needs his dinner. The full breasts of the stone woman show that she is a nursing mother.

133 Slightly below these stone figures, and on the right-
712 hand side of the canyon, is the old fort, where in the days of fighting the Havasupais were wont to retire when attacked. The fort is impregnable on three sides, being precipitous, and on the fourth is accessible only up a narrow trail, which is guarded by piles of rocks which are ready to be tumbled, even by a woman, upon the heads of foes who attempt to ascend. The fortifications and stones for defence still remain, but it is many years since they were used for their original purposes.

000 One's mind becomes very active as he looks upon this tribe of Indians and thinks of their traditions, history, and life. So far, their almost entirely isolated
[648] condition has been their preservation, although, sad to say, much of their earlier contact with our civilization was not of the best character.

Even in this land of our boasted Christianity it is true that the strong prey upon the weak. The domination of physical force is giving way to the domination of mental force, but which is the greater evil? Why

3:James T-5 (ca. 1900) 1903
NT14 Plateau Yumans NT14
Havasupai

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HAVASUPAI FORTRESS AND HUS-GLI-I-WA, OR ROCK FIGURES.

[facing p 206]

should the man born with a mental advantage over his fellows exercise that advantage any more than the man born with a physical advantage? We have not quite ceased to worship the Sullivans, the Corbetts, and the Fitzsimmonses, and, where we have, we have transferred our worship to the intellectually strong, many of whom are no more worthy our homage than the prize fighters. So now it is the intellectually strong who prey upon the intellectually weak, and, as in the physical conflict, it is inevitable that the weak "go to the wall." In simple cunning the Havasupai Indian may be our superior, but in deep craft he is "out of the field." His bow and arrow tipped with obsidian or flint pitted against our repeating rifle; his rolling of heavy rocks opposed to our Gatling guns; his mule and burro against our iron horse; and his pine torch against our electric light, — all demonstrate him to be in his intellectual minority, or at an intellectual disadvantage. He makes a fine figure in our romances, but I sadly fear that the knell of his doom has sounded, and that a few generations hence he will be no more.

Wallapai and Havasu Canyons, far more than the Grand Canyon, meet the popular idea as to what a canyon is. Their walls are narrow and precipitous, and one staying in their depths must be content with a late sunrise and an early sunset. Just above the rude bridge before described are several natural reservoirs of water. Here the canyon is not more than from one hundred and fifty to two hundred and fifty feet wide. This close proximity of the walls, which fairly overshadow one, compels one to feel his insignificance far more than when he stands in the wider and more comprehensive vastness of the Grand Canyon.

4: Smithson E-5 (1951-1958) 1959 NT14 Plateau Yumans NT14
Havasupai

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Fig. 1. Cataract Canyon, looking south from the old Apache trail. Twin monoliths, the Wegaleva, extend from the canyon wall at right. The Whitewall rises on the horizon in the distant background. The rock promontory, jutting from cliff in right foreground, has ruins of fortifications once used for defense against raiders.

CHAPTER I

GEOGRAPHICAL AND CULTURAL SETTING

This study of the Havasupai woman begins by placing her in the perspective of her environment, which includes both natural habitat and tribal culture. In sketching the cultural background, new material, mostly pertaining to the recent historic period, will be added to that which has been published about the Havasupai, and differences in opinion on certain points, which are evident among previous observers of the people, will be discussed. [121]

Natural Environment

The former range of the Havasupai included a section of the Coconino Plateau about 90 mi. long and 75 mi. wide, extending from the Colorado River gorge south to Bill Williams Mountain and the San Francisco Peaks, bounded on the west by Aubrey Cliffs and on the east by the benches of Coconino Plateau above the Little Colorado River (Spier 1928, 91). [131]

The Havasupai now describe essentially the same former boundaries as those ascribed to them by Spier except on the east, where some of them include in their territory land east of the Little Colorado River. However, in their land claim against the United States Government, they are not asking compensation for land beyond the Little Colorado. In a personal communication, their attorney, Royal D. Marks, describes the former eastern boundary as being on a line from the San Francisco Mountains northeast and north to the junction of the Little Colorado River and the Moencopie Wash, and from there northwest along the Little Colorado to its confluence with the Colorado. [648]

Boundaries of former territory probably were defined by the Havasupai only in vague terms. On the west they often camped with the Walapai, but they seem to have been in no frequent contact with tribes on other boundaries until the latter half of the 19th century. Certainly before that there was little competition for their hunting and gathering resources except with the Walapai. [101]

Rarely does a cultural group inhabiting such a small area have an environment which varies as greatly as does that of the Havasupai. With the possibilities presented them by nature, the Havasupai long ago developed a dichotomous economy which provided improved subsistence and indeed made possible a larger population within the region. Therefore, an understanding of this rather unique physical setting, with its implications for Havasupai cultural development, is essential to this study. [133]

Topography

The most striking characteristic of the area is the topography--a broad plateau bounded by a sweep of mountains to the southeast and a deep canyon

4: Smithson E-5 (1951-1958) 1959 NT14 Plateau Yumans NT14
Havasupai

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Fig. 2. Havasupai fields and orchards in Cataract Canyon, looking northwest. Havasu Creek sweeps around the base of the Wealeva at left. The summit of the Redwall forms the Esplanade, a broad terrace, seen as center and right horizon. The Whitewall rises above the Esplanade at left. Caves or rock shelters formerly used by some families and rock structures used for food storage were located at top of steep talus at the base of the Redwall.

system on the north and west. From the top of the San Francisco Peaks to the bed of the Colorado River, and within a span of about 60 mi., there is a difference in elevation of roughly 10,000 ft. Elevations on the plateau are between 6000 and 7000 ft., while the Havasupai farmlands lie on the floor of Cataract Canyon at an elevation of 3200 ft. This altitudinal range is accompanied by a change in climate with significant differences in flora and fauna. 133

Geology

The geology of the Grand Canyon, which contains one of the most complete stratigraphic exposures on earth, is a striking feature, but beyond that it is of particular importance in relation to the water supply.

The Coconino Plateau is formed by the Kaibab limestone, which exhibits some karst topography and is extremely pervious. The mountains to the south and east are mainly basalt, being of volcanic origin, and a number of smaller cinder cones dot the landscape. The San Francisco Peaks have no permanent surface streams draining from their slopes, and it has been speculated that subsurface drainage from this area may be one source of the springs which emerge from pervious geologic strata in Cataract Canyon.

The Cataract Canyon drainage system, one of the major tributaries of the Colorado River, drains a region roughly rectangular in shape, approximately 50 mi. wide and some 60 to 70 mi. long, comprising an area of about 3500 sq. mi. Its southern boundary extends from Mt. Floyd and Bill Williams Mountain on the west to the San Francisco Peaks on the east. The area includes a major part of the Coconino Plateau.

Although, in this semiarid climate, the thirsty soil with its struggling plant cover and the underlying pervious limestones of the plateau absorb much of the precipitation, the torrential rains and sudden winter thaws so characteristic of desert country produce flood conditions in the lower canyons, an ever threatening hazard for the Havasupai. [132]

The Cataract Canyon drainage system originates in shallow valleys and deeper arroyos eroding the surface Kaibab limestone. The trellis pattern of arroyos on the plateau channels all run off into two canyons, Lee's and Walapai, which are the major tributaries of Cataract Canyon. The two main horse trails entering Cataract Canyon also follow these two tributaries. [487]

Cataract Canyon is formed by a broad upper gorge defined by the massive Coconino sandstone standing in sheer walls 1000 ft. high. Locally designated the Whitewall(Fig. 1) this prominent cliff has a talus composed of the Hermit shale which gives way to the Esplanade, a broad shelf sloping gently to the rim of the canyon's inner gorge.

4: Smithson E-5 (1951-1958) 1959 NT14 Plateau Yumana NT14
Havasupai

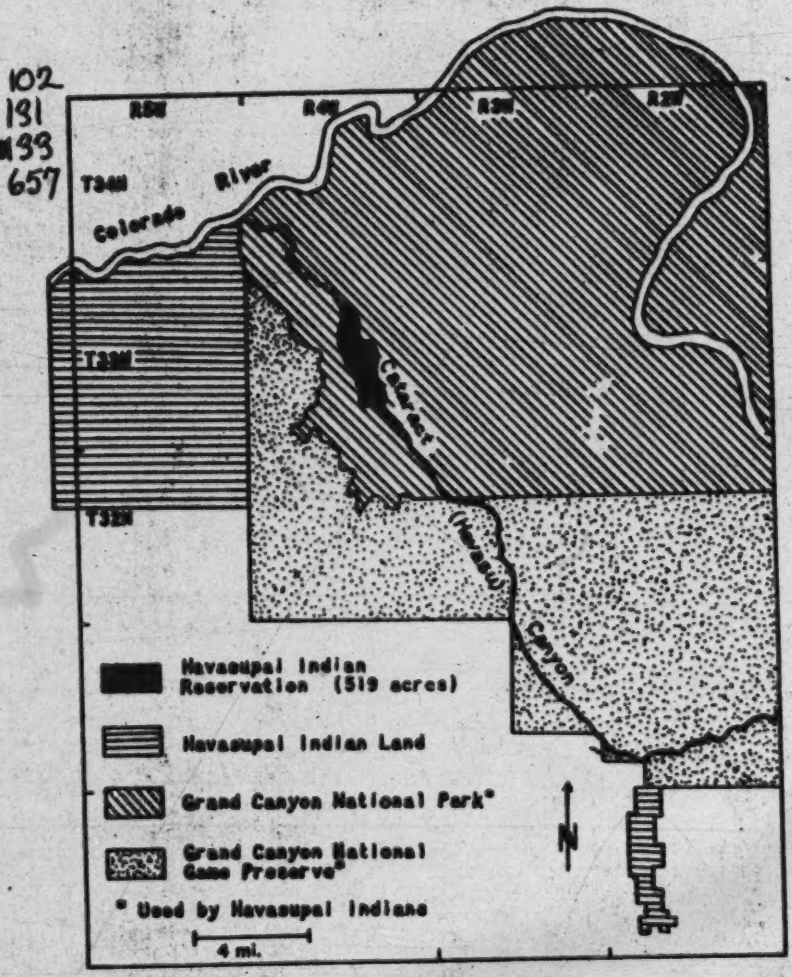

Fig. 3. Havasupai Indian Reservation and other lands in relation to National Park and National Game Preserve boundaries.

At an elevation of 4000 ft., the Esplanade, 1 mi. wide in places, crumbles away in ragged steps through the upper strata of the Supai formation. Abruptly, vertical walls break away, dropping 500 to 800 ft. and forming the narrow inner gorge of Cataract Canyon. The Supai formation, composed of sandstone and shale, locally is called the Redwall in reference to its color, which contrasts with the Whitewall above. This is not to be confused with the geologic designation of the Redwall limestone, an underlying formation exposed downstream from Supai village in the area of the waterfalls. It is from the crumbling top of the Supai formation that storms wash huge boulders which tumble and crash to the canyon below.

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The Factor of Water Supply

The existence of permanent water sources determined the residence pattern. The Havasupai have been described as seminomadic, but a more accurate term might be seasonally migratory. On the plateau, families sometimes built temporary brush shelters when they were harvesting pinyon nuts or other occasional crops, or when the tribe assembled for ceremonial or other purposes, but for the most part, families erected permanent structures to which they returned year after year as long as the house was deemed suitable. The presence of water within a reasonable distance was the determining factor in the location of both permanent and temporary camp sites, excepting those of the most transient nature. There were a number of permanent springs known on the plateau, and the karst topography provided natural reservoirs for retaining precipitation. It is speculated that the prehistoric Havasupai, with the karst examples before them and having the engineering skill and industry to build and keep in constant repair the canyon irrigation system, probably built dams on the plateau to impound water at some of the sites now similarly used by them or neighboring ranchers.

221 312 [342] [361] [241]

Water sufficient for irrigation was present at a site called Indian Gardens, which was located a short distance below the canyon rim on Bright Angel trail and which was farmed by the Havasupai in early historic times. Prospect Valley, west of Cataract Canyon, also was farmed (Spier, personal communication, 1957). In addition, several other areas, including one on the floor of Grand Canyon proper, were farmed by means of irrigation.

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In Cataract Canyon,* a short distance above the village area, numerous springs emerge on the canyon floor, flowing over impervious shales in the Supai formation. The water is highly charged with minerals, travertine being deposited along the stream's course. This deposition accounts for some of the erratic behavior of the creek. Masses of crumbling travertine jut from the ground here and there, evidence of past shifting of the creek channel. Havasu Creek,* swollen by melting snow or desert cloudbursts, churns its banks into mud, sometimes sweeping away a man's field and the ground beneath his house.

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*The names, Cataract and Havasu Canyon and Cataract and Havasu Creek, appear interchangeably in the literature and all four terms are in common usage among residents of the area. [103]

[Text continues on page 10]

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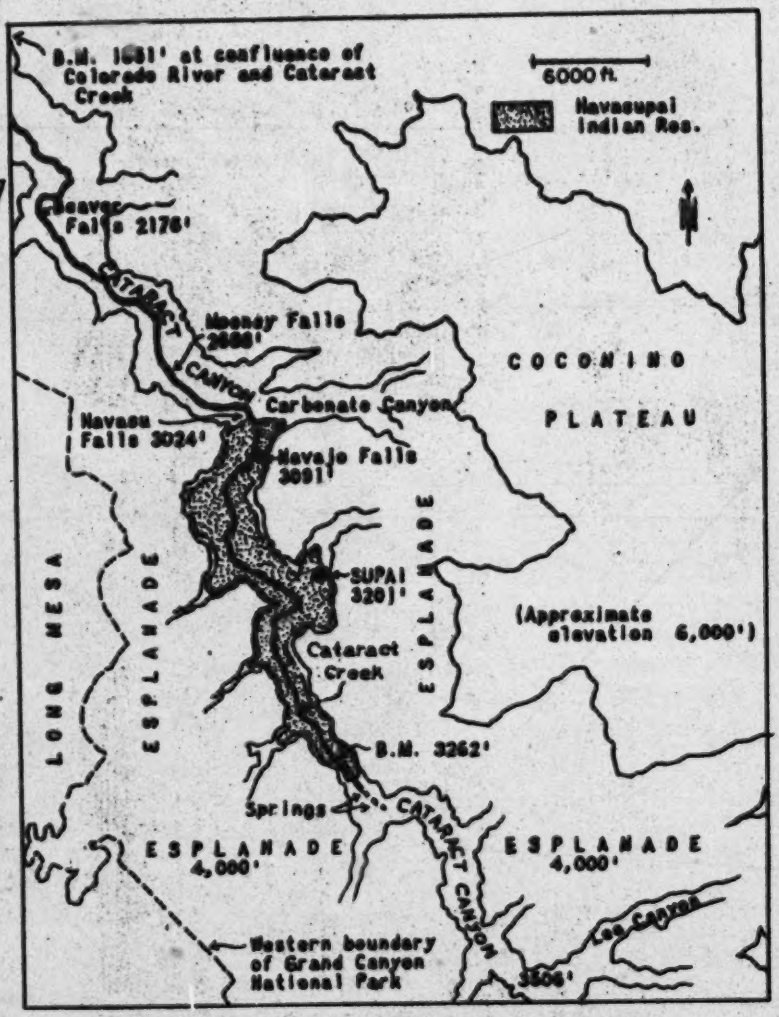

Fig. 4. Havasupai Indian Reservation in relation to topography of Cataract (Havasu) Canyon, showing elevations from the Coconino Plateau to the Colorado River.

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Fig. 5. Sketch showing Havasupai Indian Reservation in relation to topography.

4: Smithson E-5 (1951-1958) 1959 NT14 Plateau Yumans NT14
Havasupai

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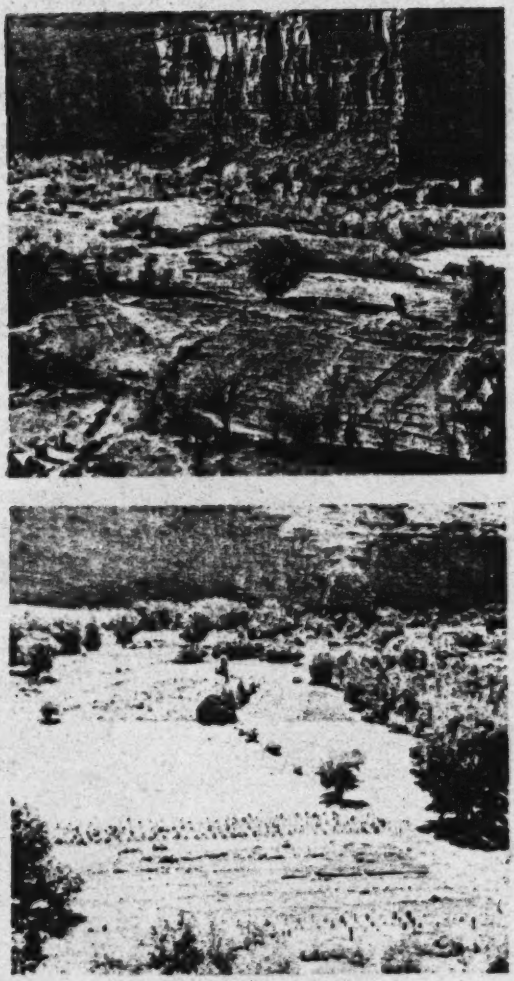

Fig. 6. Fields in Cataract Canyon. Irrigation water is diverted from Havasu Creek onto fields by means of a system of laterals and smaller ditches. Individual plots are dyked for flood irrigation.

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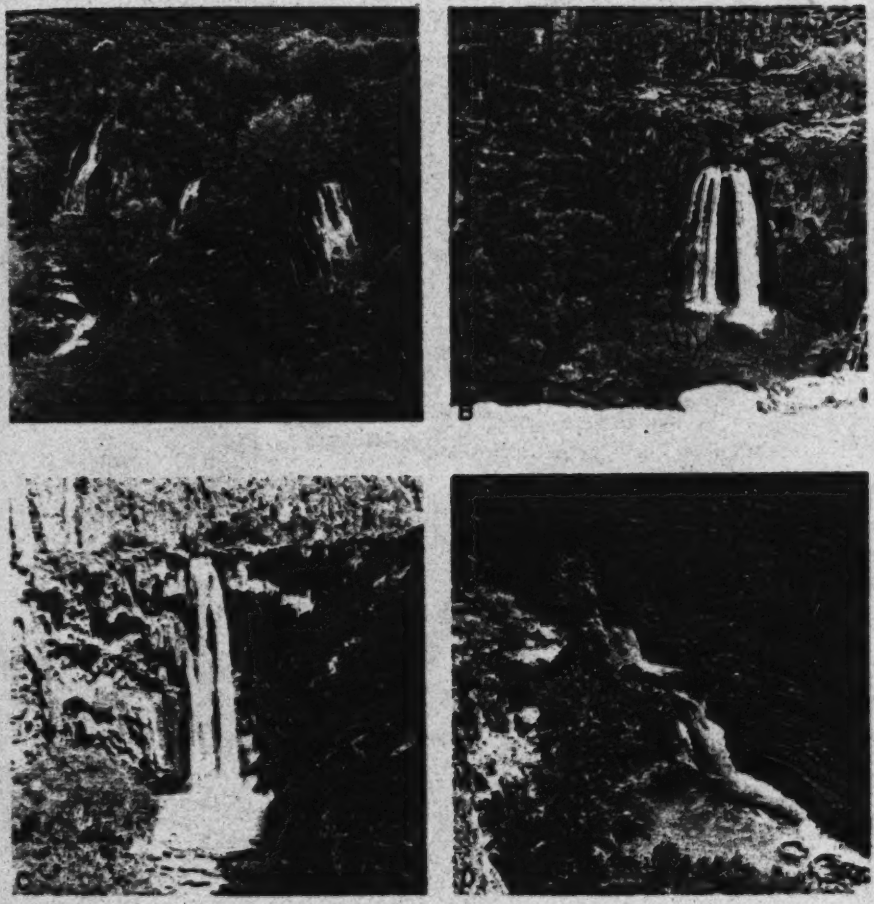

Fig. 7. Waterfalls below village. A, Navaho Falls, 80 ft. high. B, Havasu or Bridal Veil Falls, 110 ft. C, Mooney Falls, 220 ft. D, Beaver Falls, about 25 ft.

133 In January, 1911, the most disastrous flood of historic times funneled
731 melted snow resulting from a sudden thaw on the plateau and higher canyons into the confines of Cataract Canyon. A churning roar from the advancing waters signaled reservation residents, who made a predawn flight to the talus slopes. A wall of water smashed through the village, leveling primitive hogans and stone government buildings alike and sweeping away crops, food [657] stores, and personal possessions. Since that time some measures have been employed by the Office of Indian Affairs, without complete success, to contain the creek in a permanent channel as it flows through the village area.

[312] An irrigation system, installed about 30 years ago, repeatedly has suffered major damage from floods. The Indian Service plans to install new diversion headings and to build three large aqueducts with permanent footings. This is expected to stabilize the present irrigation system and to add a few more acres to land now being farmed (Kelly 1953, 56).

133 About a mile downstream from the village, Havasu Creek tumbles in a
[648] series of waterfalls which attract tourists. The scenic aspect of Cataract Canyon in recent years has become an economic asset and a precipitator of increasing Havasupai-white contacts.

133 Travertine terraces deposited at the crest of a waterfall eventually
311 divert the falls to another location. A severe flood in 1952 destroyed a 50 ft.
731 fall, lowered the creek channel for some distance upstream and rendered useless the irrigation system servicing fields in the vicinity. Additional floods over the next few years further deepened the river channel, washing out adjacent fields and leaving others without water. However, some new gardens are now being planted at lower levels along the stream where land can be reclaimed.

439 Since the two most spectacular waterfalls are beyond the reservation
648 boundary, concern is felt by the Havasupai that their budding tribal cooperative tourist enterprise may be doomed. Private business interests may be able to bypass the reservation area by providing transportation into the canyon at the falls and establishing tourist accommodations there.

Climate, Plants and Animals

132 Records of a climatological substation operated at Supai for 14 years between 1899 and 1930 reveal a maximum annual precipitation of 13.87 inches and minimum of 4.50 inches, averaging 8.89. Precipitation was highest in February, July and August (Martin and Kincer 1933, Section 25, p. 14).

Temperatures in Cataract Canyon are consistently higher throughout the year than on the plateau. Snow seldom reaches the canyon floor, but freezing occurs in the coldest months. On sunny winter days when canyon air is cool, the warmest areas are southern exposures along the top of the talus

132 slopes where storage granaries were located and where some families occupied caves and rock overhangs until 30 or 40 years ago. The humidity of the canyon makes the comparatively warmer temperatures there less bearable than those on the plateau. This, along with the scarcity of fuel, combined to make the plateau the favored winter abode.
[361]
[221]

137 Botanically, the plateau and the canyon floor represent the extremes within the Sonoran Life Zone. On the plateau, clumps of juniper predominate along with stands of western yellow or ponderosa pine and pinyon pine. Nearer the canyons, trees give way to sagebrush, grasses, yucca, and a variety of wild food plants including mescal. Prickly pear, yucca, mescal, and some of the other food plants of the plateau,are also found on the Esplanade and at lower elevations. The change in vegetation is a gradual one from canyon rim to floor, with desert plants predominating at the lower elevations. Acacia and mesquite, Mormon tea, agave, prickly pear and other varieties of cacti, yucca, salt brush, and numerous grasses from which seeds were harvested, are found at elevations a few hundred feet above and below the canyon floor. [372] Dense willow thickets border Havasu Creek, and this was the predominant fuel plant in the canyon until introduction of the cottonwood as a winter fuel source in early reservation days. Watercress in abundance and many flowering plants grow along the creek bottom and the irrigation ditches. Below the farm area, in places where the stream is impounded behind travertine terraces, cattail and other marsh plants abound, while only a few feet away the usual desert plants make a sharp contrast. [276] Datura (jimson weed) is scattered everywhere in the canyon's sandy soil; the Havasupai have experimented with it as a narcotic but have rejected it.

133 Reservation farms occupy the canyon floor, which is 1/4 to 1/2 mi. in
361 width. Houses are located on individual farms throughout the area. Fields
312 lie on both sides of the creek, occupying about 140 acres of arable land. Fruit trees, still productive, and scars of abandoned fields mark an area below the village which, until about 20 years ago, was well populated. The canyon floor drops in elevation about 150 ft. from south to north in a distance of approximately 2 mi. in the cultivated area.

487 Cataract Canyon formerly was accessible from three directions by means of a half dozen horse trails and several foot trails which entered the canyon close to the village area. Although these old trails are sometimes used at present, the Havasupai more frequently travel the improved Topocoba and Walapai trails, which are used also for packing tourists and supplies into Supai.

245 Peach trees were introduced prior to 1876 (Whiting n. d., 59), and
177 the similarity of the Havasupai term for them to that of the Hopi demonstrates their Hopi origin (Spier 1946, 124). This refutes a popular notion that John D. Lee, a refugee Mormon, introduced peaches in comparatively recent times. Other orchard crops are pears, apricots, apples, both black and white figs,

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Fig. 9. Havasupai dwellings. A, Semi-subterranean, rectangular log house, now used mostly for storage. B, Old style thatched, conical lodge with gabled passage entrance. In front of house is a brush-roofed shelter used for cooking and most family activities in good weather. C, Two-room frame house donated by the Federal government after the 1910 flood, and a one-room structure built of scrap lumber and used for extra sleeping and storage space by family of nine members.

Summary

This, then, is the setting for the present day life of the Havasupai woman. Her immediate environment lies within the confines of Cataract Canyon, striking in beauty and once considered rich in life-sustaining resources. Now, however, with tribal lands mainly restricted to the canyon, and given a stabilized or increasing population and a change in economy, the former richness of Cataract Canyon has become modest indeed. It is inadequate for the number of people living there. 131 133

While the canyon home is of primary importance to the Havasupai, it by no means excludes alien influences and pressures. Even very aged Havasupai women leave the canyon with some frequency, sometimes remaining for weeks or months with relatives or friends in neighboring towns or on other reservations. It is a common misconception of visitors to Supai that the tribe lives in isolation. It must be stressed that the Havasupai see and learn much more of the outside world than white Americans ever know of the Havasupai. 574 648

Havasupai women of middle age, probably without exception, have had some formal schooling. Most of them attended boarding school for several years. Among the young adults, many of the women have one or more years of high school. At present, youngsters spend the entire school year living at schools outside the canyon and separated from their parents. 871

Havasupai women are in touch with white American culture through radio, movies, popular records, mail order catalogues, magazines, and, more emphatically, through influences of the resident agent and missionary families, other personnel rendering services to them, and face to face contact with white people in neighboring communities as well as visitors to the reservation. 177 648

The cultural heritage of the Havasupai woman was that of a farming and hunting people, seasonally migratory and somewhat less bound to the land than were their Pueblo neighbors. The tribal culture was so unformalized as to be characterized by its meagerness of content and also by the seeming indifference or inattention to the ideal with which the Havasupai followed specific cultural patterns. While tribal traditions continue to filter from one generation to the next, customs and the body of folk knowledge are becoming much attenuated among the younger generations and are often eclipsed by foreign influences. It might be said that the young Havasupai woman of today stands with her cultural heritage as much a part of her as the shadow which extends behind her, but her mind is literally turned toward a new culture which she accepts readily as she is able to comprehend its usefulness to her. 178 182

4: Smithson E-5 (1951-1958) 1959 NT14 Plateau Yumans NT14
Havasupai

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Fig. 13. Activities in Havasu Creek. A. Young people swimming. B. Lucille and Ida Uqualla and Bert Jones washing clothes at the swimming hole. C. Andrew Manakaja and Bert Jones bathing. The creek is the only source of water on the reservation.

5:Anonymous U-4, 5 (no date) 1940
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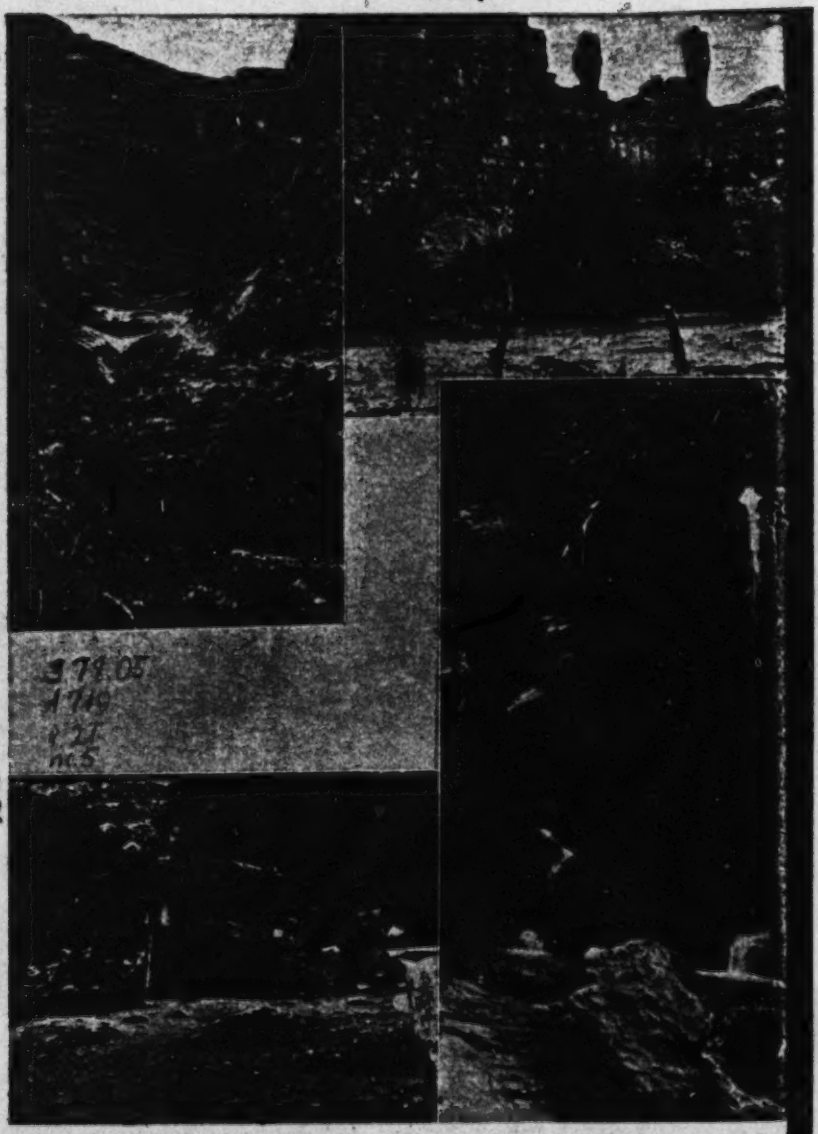

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Above are scenes from Havasu Canyon, isolated canyon tributary of Grand Canyon and home of the Havasupai Indians. Top left shows Crematory Gulch in the lower "haunted" section of the canyon, where the dead were once cremated in the caverns along the sides of the gulch. Top right shows the Twin Gods opposite Supai village. Bottom left is a Havasupai hogan and bottom right is a beautiful little waterfall below Mooney Falls.

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The Havasupai

IN Cataract Canyon, within the boundaries of the Grand Canyon National Park, nearly three thousand feet below the land above, live the Havasupai Indians. Hemmed in by towering walls of red sandstone the acreage of their reservation is very small but its fertility, spectacular scenery, and unusual setting as a habitation for man ranks it as one of the most remarkable places in Arizona. 131

The original reservation of 1880 was a tract of land about five miles wide and twelve long surrounding the inhabited part of Cataract Canyon. Two years later the size was reduced to the irregular strip of canyon bottom land extending a mile and a half north and south of the Indian settlement, an area of 518.6 acres. The population is also small. The Indian Bureau census of 1939 shows two hundred thirteen members, a slight increase in recent years. The tribe has probably never numbered more than three hundred. 161 [174]

Cataract Canyon is almost semi-tropical. The high plateaus of the surrounding country have a temperate climate but the village, shut in as it is, averages from ten to twelve degrees warmer the year round. In summer it is very hot, the temperature often reaching one hundred and twelve degrees. 132

Through the canyon's gorge runs Cataract Creek which plunges over precipitous cliffs forming several beautiful waterfalls. Mooney Falls, the largest is nearly two hundred feet high. Passing through miles of limestone formations the water is heavily impregnated with calcium and magnesium carbonates, calcium sulphate, and magnesium chloride. These mineral salts in solution over a period of time, coat everything they touch with a stony deposit and impart a light tinge to the water which imparts a light blue or greenish blue to the creek. Where the water gathers in pools at the foot of the falls, it is a fascinating turquoise color. 133 135

Taking their name from the water of the creek, these Indians have become known as the blue-water people (Havasu, blue or green water; pai, people). 101

The Havasupai speak a language of the Yuman stock, and are closely allied to the Hualapai their near neighbors on the west. They speak a similar language, having a slight variation of dialect. Hualapai, Havasupai, and Yavapai are dialects of a single language which is closely related to Mohave and Yuman. 197

HISTORY

Archaeologists have believed the Havasupai formerly built and occupied villages of a permanent character on the Colorado to the east of the San Francisco Mountains where ruins may be found today. As a result of war with other tribes they abandoned these villages and took refuge in the San Francisco mountains subsequently leaving these for their present home. In Cataract Canyon they found plenty of water, a mild climate, and protection from the raids of more powerful tribes. Recent evidence would seem to show that this is not correct, although the information here given is to be found in Hodge, Handbook of American Indians. 174 [147]

The first written record of the Havasupai dates from 1776 when Padre Francisco Garces, a Spanish mission priest, stopped there. There was little contact of the tribe with the Americans for the next hundred years, except for an occasional visit of trappers, prospectors, and exploring parties. 175

For several years following the establishment of the reservation 175 648

6: Schwartz A-5 (1953)1956
NT14 Plateau Yumans NT14
Havasupai

THE HAVASUPAI 600 A.D.—1955 A.D.: A SHORT CULTURE HISTORY

By DOUGLAS W. SCHWARTZ

THE HAVASUPAI are a tribe of Yuman-speaking Indians who now live at the bottom of Cataract Creek Canyon, a side branch of northwestern Arizona's Grand Canyon (Spier 1928). When they were first discovered, in 1776 by an exploring Franciscan priest, they were leading an economically double life. In the spring and summer they irrigated corn and bean fields from an ever-flowing spring of clear blue-green water, while during the winter they migrated up to the plateau,

FIG. 1
Map of Arizona showing the distribution of prehistoric cultures (After Colton).

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Cataract Canyon viewed from the northwest.

[P.32]

THE HAVASUPAIS, PEOPLE OF CATARACT CANYON[1]

Richard Emerick

The American Southwest is known the world over for its unique, colorful, almost frightening beauty and there is no more awe-inspiring part of it than the Grand Canyon country in northern Arizona. Here, in the past ten million years or so, the Colorado River and some of its tributaries have carved a mile-deep wonderland into the Kaibab Plateau. The place is a network of canyons with the majestic Grand Canyon itself at its center. Nearly all of these gorges are being cut by intermittent streams born of the melting snows and summer cloudbursts. Therefore, throughout most of the year the floors of nearly all of them are dry and desert-like. One of these chasms, however, is richly green, for through it, from an inexhaustible source, flows a small but bounteous stream. This oasis is called Cataract Canyon and it has been the home of the Havasupai Indians for hundreds of years.

In historic times, at least, the Havasupais have certainly lived where they do now—in and around Cataract Canyon. The early Spanish records make frequent reference to such people as the Coninas, Cosninos and Coconinos living in this same region. There is every reason to believe that many of these references, by names which are corruptions of a Hopi expression for their western neighbors, were to the Havasupais. The legends of these people, when correlated with what is known of the pre-Columbian history of the southwest, indicates that they have inhabited the Grand Canyon country since perhaps as early as 800 A.D.

The first positive record of the Havasupais was made by the Franciscan missionary, Padre Francisco Tomas Garces, who, on June 20th, 1776, was guided into Cataract Canyon by a party of Walapais. His diary tells us that the people he found there were extremely friendly and, in fact, they attended him so royally and fed him so well that he remained five days.

1 I wish to extend my thanks to the Anthropology Department of the University of Pennsylvania for financial assistance with research in the summer of 1953.

from Peach Springs is a good one and the trail from Walapai Hilltop to the village is only eight miles long. It is this way that most visitors come.

The lasting impression one receives when descending any of the trails is one of almost overwhelming awe. The great walls rise higher and higher and as the gorge they enclose grows so narrow that sometimes the sky is scarcely visible, it seems that the canyon has claimed for itself the puny creatures plodding through it. The experience is inspiring, exhilarating and sometimes uncomfortable. To heighten the sensation a hot, dry breeze stirs constantly and except for an occasional desert plant that stubbornly remains green, everything looks as if it hasn't seen water for a thousand years. Just as one begins to adjust mind and body to this oppressive, dry heat, however, the canyon takes another of its endless turns and suddenly the air seems to cool and freshen. At first the senses only suspect this new presence, but after rounding another bend, the eyes and ears confirm it, for a luxuriant growth of small willows and cottonwoods appears and the welcome, singing sound of a stream can be heard. Here, seeping from the canyon floor about a half-mile above the village, is the water that makes Cataract Canyon habitable. As the tiny stream trickles along, many small springs add themselves to it until, a few hundred yards from its birthplace, Cataract Creek is full grown.

As the creek hurries busily on through it, the canyon widens abruptly to nearly a quarter-mile across and neatly fenced fields and orchards spread out between the great red walls. This is the village. This is Supai, the home of the Havasupai Indians.

The village is spread all over the canyon floor. The only concentration of buildings is that of the homes built by the government for the agent and a school teacher. Not far from them is the small schoolhouse, the mission, and the Indian store. The Indians have tended only slightly to cluster about this center of community activity. Many of the aboriginal dwellings have been replaced by small wooden frame houses which were first introduced by the government as a relief measure after the tragic flood in January, 1911, when five days of thaw on the plateau was followed by several more days of heavy rain and the accumulated water rushed through the canyon in a flood crest which utterly destroyed the village and most of the fields. Some of the old earth and pole houses may still be seen. Many of the families prefer them to the more modern ones for

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Mamie Chickapaniga has a right to be proud of her corn field for it is the lush reward for much tender care.

●133 Perhaps a mile downstream from the point at which the canyon spreads out to make room for the village, it quickly narrows once more. It is here that the first of three magnificent waterfalls may be seen. By this time Cataract Creek is the size of a small river and has become brilliantly blue. Carbonates of lime, which become more concentrated as the stream flows along, give it this color. The breath-taking, snowy-white falls plunging as far as 220 feet over vermilion cliffs into turquoise pools is a sight which no one who has seen it will ever forget. Though these falls are only a mile or so below the village, it is strange but true that several of the women who are middle-aged or older and have lived here all their lives, have never taken the trouble to see them.

312 Cataract Creek beautifies this canyon to be sure, but probably the most vital use to which the water is put is that of irrigation. Above the village two log and brush diversion dams scoop water from both sides of the

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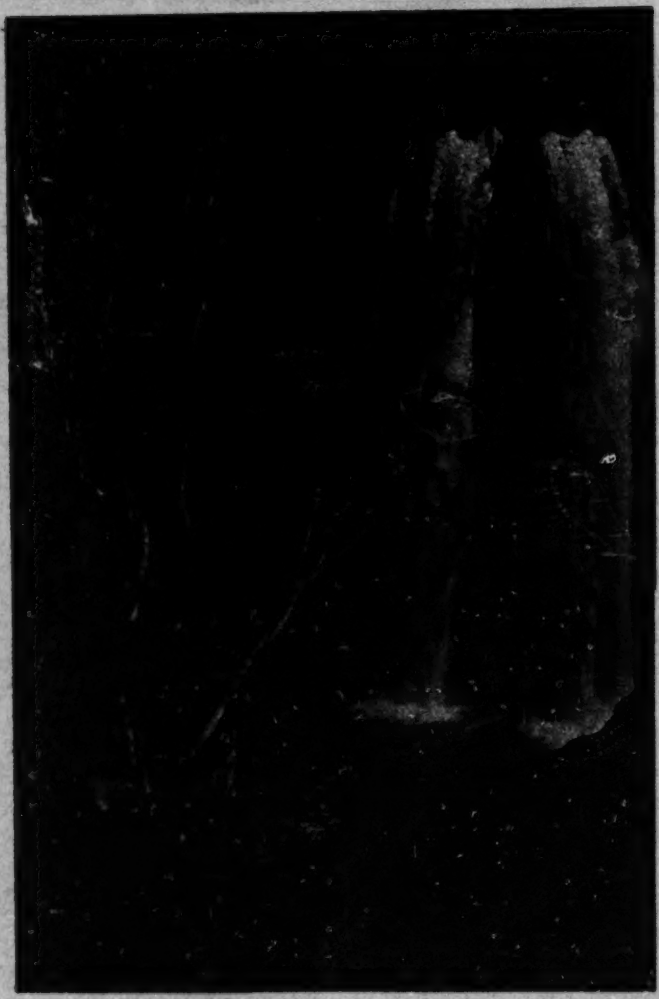

Havasu falls is the loveliest of the three cataracts over which Cataract Creek tumbles and is one of the most memorable sights in the Southwest.

[P.38]

11:Shufeldt D-4 (no date) 1892
NT14 Plateau Yumans NT14
Havasupai

maps the San Francisco mountain is represented as belonging to the continuous Mogollon chain, which comes from the east southeast, and was called Sierra de los Cosninos, the name of a tribe of Indians inhabiting this region. I am under the impression that Leroux, the early explorer in that part of the country was finally murdered by the Cosninos, but I do not remember that the account has ever been printed." Whipple also refers to the "Cosnino caves," remarking that "the Cosnino caves had been plastered with mortar, showing more artistic skill than is practiced by the present occupants of the country" (*loc. cit.*, p. 15). And again on page 19 he goes to show that, taken collectively, the Pontos, Cosninos, and Yampais together number 6,000 souls; of these 2,000 were Yampais (p. 17). But all this is very brief and unsatisfactory. 195 114

Capt. John G. Bourke in his work on "The Snake-dance of the Moquis of Arizona" (1884), says, "At Keam's ranch we met Mr. Alexander Steven, a bright Scotchman who during the past 12 years has had considerable experience as a metallurgist and mining prospector in Nevada and Utah. He gave me a thrilling account of his journey westward to the country of the Cohoninos, a tribe of Indians living in the cañon of Cataract Creek, near its junction with the Grand Cañon of the Colorado in this Territory.

"They number only from forty to fifty warriors, live in the cliffs in winter, and build 'wickyups' or sapling lodges in summer. They say that the Hualpais (Wolapais), Apache-Mojaves, and themselves are all one people—Cohoninos—but that *their* proper designation is the "Ah-Supai. 195 101 [342]

"They raise an abundance of finest peaches, good corn and melons, and weave unusually fine and beautiful baskets. They are great hunters, and eke out a living by trading off buckskins, and sometimes mountain lion pelts, to the Moquis, Navajos, and Apaches. 195 [241] [385] [439]

"The cañon in which they dwell is 4,500 feet deep, and is that of the Cataract Creek, a strong body of clear water tumbling by a series of cascades into the Grand Cañon of the Colorado, 1,500 feet still deeper, and separated from their village by a series of blood-curdling precipices and chasms" (pp. 80, 81). Captain Bourke, in speaking of the Moquis, says further, that "Intimate commercial relations are maintained with the Cohoninos or Ava-Supais on the west (*loc. cit.*, p. 254). [133] [439]

In a lecture before the National Academy of Sciences, delivered in Washington, April 22, 1882, Mr. Frank H. Cushing in referring to the Zunians said, "Interesting among the hero-gods is the great priest of all religious orders save that of the bow, *Poshai Ank'ia*. In the days of the new, yet not until after men had begun their journey toward the east, he is supposed to have appeared among the ancestors of the Zuñis, the Taos, the Coconinos, and the Moqui Indians, so poor and ill-clad as to have been ridiculed by mankind." This lecture was afterwards published in The Popular Science Monthly, of New York (1882, p. 191). 114 993

11: Shufeldt D-4 (no date) 1892
NT14 Plateau Yumans NT14
Havasupai

175 Mr. Cushing's best account of these people, however, is published in another connection, wherein he relates how he made a long and dangerous journey from Moqui to the Supai Cañon.*

Following his description of hazardous descent into that fearful gorge, Cushing goes on to say in his article, that "the first Ha-va-su-pai I saw [291] may be taken as a type of his race. But lightly clothed, a strange close head-band around his temples, he swiftly passed from one bush to another as we we emerged from the little grove. Below us stretched a [133] green, moist plain of sandy soil, nearly two miles long by half a mile at its greatest width. We could catch only occasional glimpses of it through the rank growth of willows, the leaves of which everywhere brushed our heads as we rode along the river trail; these glimpses, [241] however, revealed numerous cultivated fields of corn, beans, sunflowers, melons, peaches, apricots, and certain plants used in dyeing and basket making, and usually carefully protected by hedges of wattled willows or fences of cottonwood poles. Everywhere these fields were crossed [312] and recrossed by a net work of irrigating canals and trails. Here and there were little cabins, or shelters, flat-roofed, dirt-covered, and closed [342] in on three sides by wattled flags, canes, and slender branches, while the front was protected by a hedge like those of the fields, only taller, placed a few feet before the house, and between which and the house burned smoky fires."

"The houses were always nestled down among the thick willows [361] bordering the river, or perched on some convenient shelf, under the shadows of the western precipice. In several places, within some of the great horizontal cracks of these western cliffs, and often high up, were little buildings of stone laid in mud plaster, and not unlike the cliff dwellings we had observed on the way down, and of which ruins exist in almost every cañon throughout the great southwest."

"When we again caught sight of our Kuhni, in a little opening near the trail, he was evidently uncertain whether to run forward and warn the tribe—whose voices, mingled with the barking of dogs and the murmuring of the river, could be heard below—of our coming, or wait to greet us. Finally, he shouted in a rapid, gurgling, soft sort of language, that the villagers were coming; and then, with sort of a questioning smile, turned toward us, keeping up a ceaseless gibberish, but eyeing me closely, and evidently thinking me the most curious member of the 114 175 party."

The only other facts of importance given in this narrative are that [756] those Indians have their medicine men and use the "sweat house," a [515] plan of treatment seen among many other tribes. They have a great [231] number of dogs about their village, and many of the families are blessed with from five to six children. They are, so far as the writer is aware, [648] upon excellent terms of friendship with the whites. I am not aware

*Cushing, Frank Hamilton. "The Nation of the Willows." The Atlantic Monthly, September, 1882, pp. 362-374. The quotation I make is from page 374.

11: Shufeldt D-4 (no date) 1892
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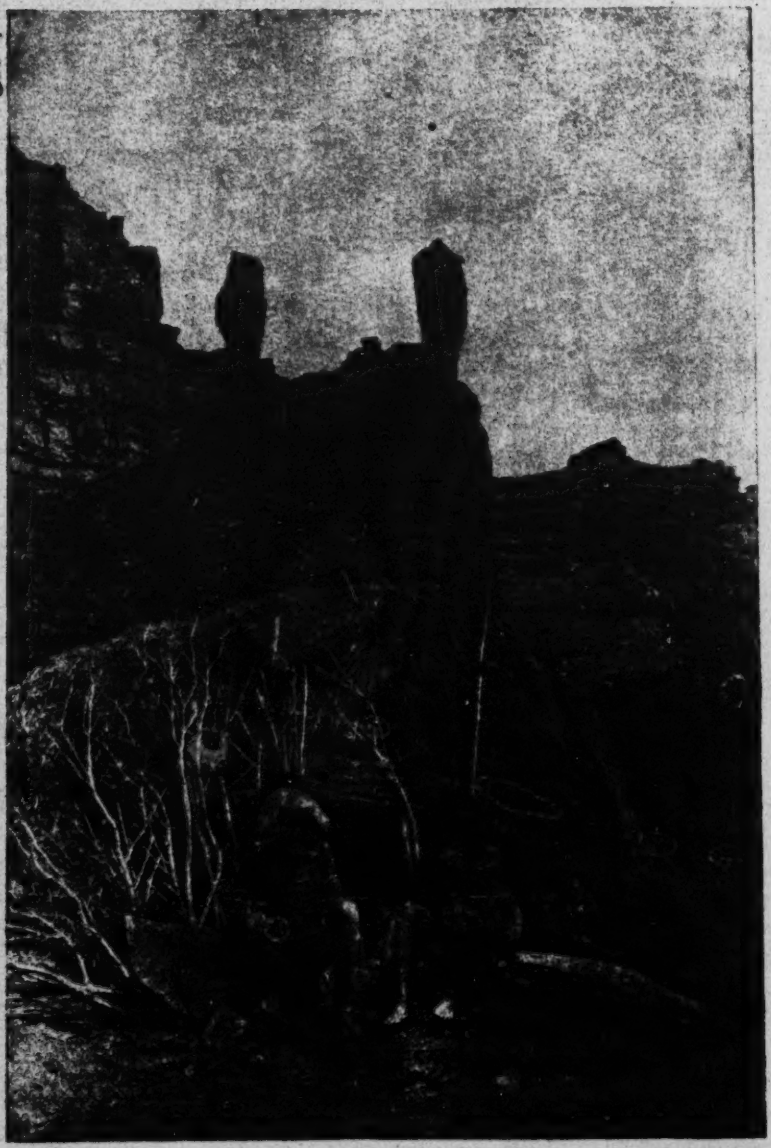

AN AGED PAIR OF HAVESU-PAI INDIANS.

[p. 390 - A]

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AN HAVEBU-PAI LODGE IN SU-PAI CAÑON, ARIZONA.

[p. 390 - B]

The Nation of the Willows. I

291 The first Ha-va-su-pai I saw may be taken as a type of his race. But lightly clothed, a strange close head-band around his temples, he swiftly passed from one bush to another as we emerged from the little grove. Below us stretched
● 133 a green, moist plain of sandy soil, nearly two miles long by half a mile at its greatest width. We could catch only occasional glimpses of it through the rank growth of willows, the leaves of which everywhere brushed our heads as
241 we rode along the river trail. These
311 glimpses, however, revealed numerous cultivated fields of corn, beans, sunflowers, melons, peaches, apricots, and certain plants used in dyeing and basket-making, and usually carefully protected by hedges of wattled willows or fences of cotton-wood poles. Everywhere these fields were crossed and recrossed by a net-work of irrigating canals and trails.
342 Here and there were little cabins, or
361 shelters, flat-roofed, dirt-covered, and closed in on three sides by wattled flags, canes, and slender branches; while the front was protected by a hedge like those of the fields, only taller, placed a few feet before the house, and between which and the house burned smoky little fires. The houses were always nestled down among the thick willows bordering the river, or perched on some convenient shelf, under the shadows of the western precipice. In several places, within some of the great horizontal cracks of these western cliffs, and often high up, were little buildings of stone laid in mud plaster, and not unlike the cliff-dwellings we had observed on the way down, and of which ruins exist in almost every cañon throughout the great Southwest.

123 When we again caught sight of our
609 Kuhni, in a little opening near the trail, he was evidently uncertain whether to

[previous portion of this article not processed]

12: Cushing E-5 (1881) 1882
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Havasupai

500 varieties. Upon this strange desert,
132 some sixty-six hundred feet above the level of the sea, considerable rain falls during latter July, August, and September; and with the end of November heavy frosts begin and snows ensue, occurring with greater or less frequency and severity of cold throughout the larger part of the winter. During the
136 latter season, these vast plains, undulations, and forest mesas are filled with game of the nobler sort, such as deer, elk, antelope, and bear; followed by the constant coyote and fox, "the herds and herders of the Ha-va-su-pai," as the Zuñis say. Quite different is the Cata-
●133 ract Cañon itself, situated only thirty-five hundred feet above the level of the sea, the occupied portion of which is more than three thousand feet below the surrounding desert, — a veritable perennial oasis, with almost subtropical climate and luxuriance of vegetation, with a clear, cold, never-failing, impetuous stream cleaving its way through the little plain at the bottom of the cañon, the waters of which are strongly impregnated with carbonate of lime.
132 The atmosphere is as moist, warm, and temperate as that of the surrounding waste is arid and extreme. Frosts rarely and snows never visit its little plains, and even the quietest pools along the rushing little river are never fettered
137 by ice. The agave, or century-plant, which nowhere appears on the surrounding plains, reaches almost giant proportions in its valleys, furnishing the
[273] material for the mescal, or *ak-na*, so abundantly prepared by the Ha-va-supai, and so well known among the more southern tribes of the territory and of Old Mexico. Apricots ripen in June, peaches in July; corn is gathered and
[262] eaten during both months, and again planted, to ripen during September and
[P. 541B] October.

October. Quail and smaller birds, rabbits, squirrels, and a few burrowers constitute the sparse fauna, although along its unscaled cliffs still wanders the bighorn, or *Ovis montana*. No fish or aquatic animals, save the Gila monster and a few lizards, appear. Luxuriant vines and shrubbery; willows, cottonwoods; flags, tules, and other aquatic plants, with a marked absence of grasses, save a kind of cane along the river, and of flowering plants, with here and there the amole, or Spanish bayonet, and agave, — these make up the richly growing but unvaried flora.

Only two trails descend this cañon: the one from the southeast, — by which we entered, — with a southern branch, over which the cavalry had passed; the second from the southwest, winding and climbing through a maze of side cañons, a wonderful example of Indian engineering skill, unsurpassed in grandeur, difficulties, or dangers. The passage of either of these trails, especially of the latter, requires the greater part of the day. From the entrance at the head of the little side cañon, tending down from the southeastward, through which the first-described trail leads, forty turns are made, each one leading further downward, and revealing entirely new views of the indescribably grand and beautiful rock scenery. During all this passage of more than twenty miles, scarcely a place is encountered that a stone's-throw or an arrow-flight would not span, notwithstanding the depth gradually increases to three thousand feet. In some places the rocks overhang the traveler's head on either side, leaving only a narrow strip of sky, while at others the opening assumes a funnel shape: the gray lime sandstone, which forms the upper half of the rock walls, gradually slopes back a quarter of a mile, where it suddenly ascends in a rugged series of promontories, buttes, and cliffs; the red sandstone, which forms the immediate cañon-border, more obdurate, re-

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133 tains its primitive narrowness and angular beauty, only here and there worn by the blasts of rain and wind and sand. These features are characteristic until the last turn reveals a bending plain, in no place exceeding half a mile in width, formed by the junction of the lesser southwestern cañon with the main southeastern, and reinforced by the wearing of the emerging river for ages, — and this is the sandy, loamy plain where the Ha-va-su-pai or Kuhni kwe dwell,
133 and the groves of cottonwood and willows grow. Below the little village,
[361] which numbers about thirty-five huts, are four beautiful cataracts, from which the stream derives its American name. The first two are inconsiderable, although beautiful, sheltered as they are
[137] by thrifty, irregular growths of cottonwood and willow, the forms of which are reflected, and torn into a thousand fragments of green and silver, by the rippling, boiling, surging, rushing waters. The geologic history of these two is repeated in a third and grander fall, a mile or two below the head of the village. Huge rocks have tumbled down to the very water's edge from the cliffs on either side, which here almost meet each other, leaving only a broken path on the eastern bank, difficult for the passage even of foot travelers. The unaided waters have built for their own adornment a horseshoe-shaped, overhanging dam of carbonate of lime, three hundred feet in height, filling in the basin above, to the very surface of the pool, with a confused jumble of petrified trees, mosses, ferns, flags, and what not, preserving only one deep, narrow, serene channel through the middle. And from their stony, dead ancestry spring ever fresh trees, mosses, ferns and flags; their rootlets and dead leaves continually changing to stone, their branches shooting upward to form a network so green and massive that it hides the waters which are at once their life and destruction. Over the top and very

● 133 edge of this rock-wall springs a dense grove of cottonwoods and willows, with branches so abundant and green and high that they challenge the blue, cloudless sky, which only here and there peeps through them into the waters. The whole Kuhni River spouts forth in a mass of snow and crystal blue from out this marvelous verdure, sprinkling the leaves with its spray in its downward course, — leaves which reveal only now and then the red and yellow of the rock-wall to which they cling. It flattens itself, splits, midway down, on a huge stalagmite of its own making, and sinks into the vast green pool at the bottom, one mass of spray and foam and mist. It is useless to try to paint these falls, with their crown of perennial verdure, their three hundred feet of crystal glory, their footstools of eternal, circling rainbows, which sink far into the clear green depths of the fathomless pools, or rise on the clouds of mist, and turn to ashes and lime on the leaves of the trees around them. You descend a series of niches cut into the vertical rock-wall, and, after slipping and grappling, and covering yourself with lime, skinning your shins and nose, and meditating for a moment on eternity, you find yourself at the bottom. A huge side-cañon comes in from the right, and, joining the main one, widens your view. But what care you for sky and clouds? Are you not face to face with a fairy grotto under the falls, white as snow and streaked with red and yellow? Are you not among the rainbows, even holding your breath to count the glories around you?

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You turn your face from all this, cross the stream on a crust of lime bridging it below the pool, climb a great mound of fallen rocks under the shadow of thick, lime-frosted trees, and make your way with difficulty along the deep, narrow, almost straight, but impetuous channel of the river, through a low, tangled forest, for a mile or two, when you

●133 come to an opening, and hear the deep roar of another waterfall, the thunders of which echo eternally up and down the narrow, dark cañon. You are surrounded by heaps of ashes, charred bones, beads, muskets, bowls, shells, and other savage possessions, some of them [764] on the bare rocks, others on the thin, sandy soil; for this is the cremating ground of those among the Nation of the Willows who meet their death by accident, and these are their funeral pyres. You step a few rods beyond, and find yourself upon the brink of a precipice of four hundred feet, over which, to the right, plunges in an unbroken spout or sheet the whole river, striking the basin below with deafening thunder, and sending clouds of spray far into the dark, green chasm below. I cannot attempt to describe this waterfall. It is formed like the preceding one, but, while not so beautiful, is wonderfully grand. It is named by the Indians "Mother of the Waters;" and by prospectors "Mooney Fall," because an adventurer of that name, in attempting to descend the precipice hand under hand on a rope, became giddy, and fell upon the rocks below, where now his bones, ever washed and whitened by the limy mists, give to the Ha-va-su-paí a warning of the forbidden pass to the "home of the mother of the waters;" [776] for he believes that the spirits of his ancestors sometimes float up and down amid the mists and rainbows, or that animistic demons lurk in the green, shadowy depths of the chasm.

101 The nearest neighbors of the Ha-va-su-paí are the Hua-la-pai, who roam over the great plains west of the cañon, and the Pai Utes, to the north of the cañon of the Colorado Grande, who, although only a few miles away, are separated from them by the Grand Cañon, and can reach them only by going far to the southwest, crossing the Colorado, and passing through the territory of the Hua-la-pai. On the south,

/97/

The Havasupai

133 [131] The home of the Havasupai is in Cataract Cañon, a branch of the Grand Cañon of the Colorado. Without question it is the strangest dwelling place of any tribe in America. In all the long leagues of the cañon's windings there is but one small spot where the gorge widens. Here is an amphitheatre. Its bottom has filled with earth, the weatherings of untold ages, and at the spot where the narrow rift begins to widen the blue water springs from the earth. The clean, clear cut, perpendicular walls of red sandstone tower four hundred feet toward the heavens, and back of these sheet walls are others, but broken, ragged, cut, cañoned, and tumbled into a wilderness of rock, ever mounting higher, until at the cañon's rim one is three thousand feet above the bottom of the chasm in which these people have their home. Standing on the edge and looking down into this bewildering gorge one sees many fanciful forms, fashioned through eons from the world or rock: castles, citadels, pyramids, pinnacles, and sphinx-like sculptures, tinted and mystified with the incomparable atmospheric coloring of the desert, and ever wrapped in death-like stillness. As he gazes there is nothing to suggest that half a mile below and twenty miles away, at the bottom of this awful gash, is a garden spot, and a village of humans.

[131] 487 To reach this little oasis there are but two trails, and he who selects one will wish he had taken the other; both follow routes chosen by prehistoric man. The sandalled feet of unknown generations toiled up and down these tortuous ways ages before there was need of making them accessible for beasts of burden. After hours of winding about sheer cliffs, down narrow gorges, patiently picking a /98/ way back and forth across crumbling rocky slopes, one reaches at last the home of the Havasupai. The floor 131 is half a mile wide, scarcely two miles long, and contains an 133 area of less than five hundred acres. The never-ending stream from which this small but picturesque tribe derives its name, (1)

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1. The name Havasupai, "Blue Water People," is of Yuman origin, from aha',

/98 cont./

101 water; vasú, blue; and apá, man; and was first applied to them by the Walapai and other Yuman tribes, who had been impressed by the peculiarly transparent blue of the stream flowing through Cataract Canon. By several neighboring tribes and by early writers the Havasupai were called Coconinos, or Cohoninos. This is undoubtedly a Hopi word, for the Hopi still call them Kotŧunína, which, they say, is from kóhu, wood, and nína, kill, hence "Wood-killers," referring to the former Havasupai custom of breaking off limbs of trees for firewood with clubs. The name survives in that of Coconino county, Arizona.

[313]

133 and which makes life possible in the depths of the gorge, flows through the length of the little garden spot, then in a cataract leaps from the floor of the cañon to be caught in a pool below.

137 While the brink of the cañon lies in the high plateau region, the land of the piñon, cedar, and pine, the home of the Havasupai is in almost a subtropical spot that produces luxuriant

771 vegetation with fruits of several kinds. Ask a Havasupai whence came these fruits and vegetables, and he will tell you, "God brought them, all but the figs." This frank expression as to the origin of his garden products reflects a Havasupai peculiarity. Ordinarily Indians will not mention their gods by name, but the Havasupai discuss them with the same familiarity that they would their neighbors. With them, as indeed with all Indians, everything animate and inanimate is of divine origin.

773 Havasupai mythology differs but slightly from that of the
197 parent stock, and the difference in language is dialectic only.
174 Notwithstanding the similarity in myth and language, the separa-
144 tion must have occurred at a very early date, for in their features the Havasupai bear little resemblance to the Yuma or the Mohave.
[142] They are below the average Indian in stature, while the Mohave and the Yuma are far above.

161 /99/ In 1903 the Havasupai numbered about 250, but in three years disease has diminished their population to 166. The

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8. The Sun and His Daughters

●[133] [Sunset Crater National Monument, the vivid cinder cone of a volcano that erupted in the 11th century A. D., is located several miles northeast of Flagstaff, Arizona, on the southeastern edge of the former, aboriginal range of the Havasupai.]

The sun used to live at Sunset Crater, its home. Tribes used to gather around Sun's home and play games. Tribes played with Sun; Sun was the hero and always won. They played the sixteen-stick game. The tribes kept betting a little bit of hair on their bodies at a time until they lost all their bodies. Sun used them for meat. He made prickly pear cactus red fruit from the blood of animals. He used tears for drinking water. He took the liquid from inside the eyeball and made corn from it. He made beans from the kidney. He used this method to get food to feed men when the tribes gathered to play games. He gets the guts and makes dried pumpkin (the way it was cut [in strips,] for storage). He took meat from people and made deer meat from it. He fed them this food, called different tribes to games, and beat them until he killed all the tribes but one from the north rim [of Grand Canyon], the lion. The ground was higher on the north rim, and he looked toward Flagstaff. The lion could see smoke from a fire built by Coyote who built a fire in the brush they lived under. Then Coyote could get them and eat them (muskrats, ground squirrels, small ground animals, about the size of a mouse). The lion kept watching, and went across the canyon to see what Coyote was eating. He crossed on this side of Red Lake. [Near the present Williams, Arizona-Grand Canyon highway.] A large village was there. He went to house after house but all were empty. He found no human being, just one old coyote (always a man, and he always made him cook). The lion approached him by sneaking up to see what Coyote was doing. The lion watched from outside. Coyote lay inside a house like he was starving, snapping at the flies that came around on his face. The lion asked where everyone was. Coyote said, "There is no one here but me. I built all this village myself and am alone here." Lion said, "This can't be true because I have seen (feces) from babies wrapped up in the trees." Coyote said, "No, this is all from me, all my (feces)." Lion knew Coyote was lying and asked Coyote to tell him the truth, but Coyote kept insisting he was the only one around and no other people lived there. The lion said, "Well, if you said you are by yourself, give me some food to eat." Coyote said, "I am hungry. I've got nothing to eat. I'm starving."